

**Requests for Changes and Additions to
the SEQR Scoping Document for the Proposed
Lincoln Park Grid Support Center (LPGSC)
Submitted to the Lead Agency (Town of Ulster Town Board)
by TownofUlsterCitizens.org
On March 21, 2018**

The TownOfUlsterCitizens.org appreciates the opportunity to provide questions, requests and comments to be included in the Town of Ulster's Lead Agency Scope on the LPGSC. The areas covered in this document include: description / purpose of the project, environmental impacts (air, noise, odor, water, fauna, floral, visual), cost / benefit analysis, community character, cultural resources, safety / catastrophic impacts, and alternatives.

Description / Purpose LPGSC

The following are requests for specific information that is not evident in the proposal for LPGSC:

1. Although the maps in EAF Part 1 show the general area of the proposed project site, we request that the project applicant delineate on the physical site itself with bright color markers the perimeter of the site pad and the width of the entire road leading from Frank Sottile Blvd to the project site. This would be helpful for consultants and others who might be called upon to verify the proximity of wetlands, vernal pools, steep slopes, and other matters.
2. On an expanded site map with legends for grade, footprint and depth dimensions, we request the identification and capacity of any impermeable-lined basins created for retention of pollutant run-off, spills and leakage; the above-ground sewage disposal field; and any permeable basins created for storm-water management.
3. On an expanded site map, please identify the location of the towers and power line proposed to connect to the grid.
4. On an expanded site map, please identify the location of any secondary access road(s) required for fire emergencies.
5. What are the useful life expectancies of each of the following: natural gas generators? diesel reciprocating engines? lithium-ion batteries? Butler building that houses the generation and storage apparatus? storage apparatus external to the building? pollutant and non-pollutant containment areas? principal roadway? secondary emergency roadways?

6. Please explain in detail the outdoor lighting plan that includes the project site pad and the roadway(s). Understanding that the forest has many nocturnal animals, exactly how many and what kind of lights are planned (for example, low-posted, dusk-to-dawn coastal wildlife amber LEDs)?
7. How will fire hazards associated with lithium-ion batteries be: Prevented? Minimized? Mitigated after installation? Responded to and treated? Recovered from?
8. What will be the specific qualifications for the “Clerk of the Works” (project manager) who will oversee the construction of this proposed project in a forest with a sensitive ecosystem?
9. We request that the applicant formally agree not to expand the proposed capacity of power generation and storage within the project footprint upon commencement of operations. Please respond in detail.
10. When questioned about the future use of the remaining 115-117 acres of the 121-acre site, the applicant publicly promised to keep those remaining acres “forever green.” Will the applicant agree to establish a permanent conservation easement to be overseen by a competent third party whose business is land conservancy? Will the applicant fund a budget for the management and maintenance of the easement, such as walking trails and observation areas?
11. When the project is no longer viable, due to age, useful life, competitiveness or any other reason, what guarantee will there be that the applicant will safely remove the entire building, associated apparatus, roads and restore the site to its natural condition?

Draft Scope V.A.4 and V.E.1,2 raises the following questions and requests:

1. Since the need, purpose and public benefit of the proposed action are fundamental, how does the applicant define the public benefit from the perspective of proportionality—which segment of the public in the grid benefits most and least from the implementation of the proposed action?
2. Please provide a detailed analysis of the Town of Ulster need for peaker service in the recent three years compared with downstate peaker service need. State your methodology and show worksheets of the analysis.
3. If it is true that that the downstate portion of the grid being served has a peaker need but that the Town’s area need for peaker support has remained somewhat flat, is it fair to deduce that the Town of Ulster itself has no need of the LPGSC services? Explain your answer in detail.

4. When a citizen asked the applicant's Chief Development Officer (CDO) at a public meeting on January 17, 2018 "What does the Town get out of this?", the answer from the CDO was one word: "Taxes." Does that remain the only purpose and socio-economic benefit to the Town of Ulster and its citizens? Explain your answer in detail.
5. At the same meeting as above, the CDO answered another question about the advantages of the site location that benefit the applicant's business as being cheap land and proximity to high pressure gas and power lines. Is it also true, that the Town's clean air is also a factor in the applicant's business decision since State regulators would be more tolerant of pollution in the Town of Ulster than downstate? Please provide comparative air pollution acceptability data throughout the grid region.
6. The Federal Energy Regulatory Commission (FERC) in their Order No. 841 issued on 02/15/18 has removed barriers to the participation of electric storage resources in capacity, energy and other service markets operated by the ISO and RTO markets. The FERC has effectively changed the energy market to allow all types of electrical storage even beyond Lithium-ion batteries. GTM Research, worldwide advisor to power companies, has been delivering webinars about "Energy Storage Replacing Peaker Plants" competitively in a few short years. In light of these new developments, are not natural gas/diesel peakers as proposed by the applicant already obsolescent? Please provided a detailed reply.
7. If, in fact, the proposed LPGSC has a limited shelf-life as suggested by the recent FERC Order No. 841, would not the applicant be more competitive by switching its plan to clean energy generation with storage or some version of energy storage alone (for example, lithium-ion batteries, flow batteries, flywheel, compression)? Please explain in detail.
8. If the applicant proposes to use only 4-6 acres of a 121-acre site, what would be the future use of the remaining acreage? Would the applicant place a permanent deed restriction on the remaining 115-117 acres? Would the applicant leave open the possibility of expanding its energy operation? Would the applicant leave open the possibility of selling the remaining 117 acres to a commercial enterprise or providing a conservation easement to a managing party? Would public access be possible? What plan does the applicant have for managing this property? Please provide an answer to each of these questions in detail.
9. In December 2017, the New York Independent System Operator (NYISO), released a statement that concluded that three large power plants are already in line to support the grid in a volume that will exceed the capacity of Indian Point nuclear plant in Westchester which is slated for closure. Those three plants are Competitive Power Ventures in Wawayanda (Orange County), Cricket Valley in eastern Dutchess County, and a plant expansion in Bayonne, New Jersey. In light of these expansions, why is the proposed LPGSC needed?

10. One of the purposes of the Town of Ulster's Comprehensive Plan is to provide guidance for future development.

- a. The Plan's vision statement says: "It is the goal of the Town of Ulster Comprehensive Plan Committee to form an inclusive plan which fosters growth and development while preserving the integrity of the Town...this plan will ensure an enviable quality of life for future generations while the Town remains poised for continued growth...." How would the LPGSC uphold the Town's "enviable quality of life" by placing a fossil-fuel power plant in the middle of the Lincoln Park forest? Please explain your answer in detail.
- b. Goal 1 of the Plan emphasizes managing growth in relation to "Vision Statement" for the Town of Ulster [to] "... protect environmentally sensitive areas such as steep slopes, floodplains, and wetlands." How would LPGSC support Goal 1 in the environmentally sensitive areas of the Lincoln Park forest? Please explain your answer in detail.
- c. Goal 2 of the Plan calls for the preservation of "open space to buffer development and to preserve the area's scenic vistas". How would LPGSC support Goal 2? Please explain your answer in detail.
- d. 5.5 of the Plan addresses forestland. "Large expanses of mature forest lands help to define the rural character of much of the Town of Ulster. Forestland is an important natural resource that provides important wildlife habitat, valuable open space, recreational opportunities, scenic vistas, and economic opportunities." How would the LPGSC encourage the thriving of faunal and floral life and scenic vistas with a power plant and smoke stacks? Please explain your answer in detail.
- e. How would the applicant honor The Town of Ulster Comprehensive Plan's Implementation Plan (pages 102 and following pages), particularly number 1 which directs growth to existing development centers already served with water and sewer infrastructure and numbers 19, 20, and 23 which address ridge protection, aquifers, and heavy industry districts?

Potential Significant Environmental Impacts

Because the LPGSC would not exist in isolation in the environment and its individual impacts do not exist in isolation from each other, we request the applicant answer each question and request and then include a detailed analysis of the cumulative environmental impacts on air, noise, odor, water, fauna, flora, and visual. We request the applicant treat all of the projects actions and impacts as related and cumulative.

What state and federal regulations and standards (e.g., ANSI, ASTM, OSHA) apply to the applicant's industry of fossil-fuel energy generation? We request the applicant to furnish these regulations and standards and explain in detail the protocols to be used and how compliance is enforced.

In your responses to questions, requests and comments below, we request that the applicant furnish the measures, process controls and remedies that will be incorporated to assure that source contaminants and hazards do not infringe upon the natural environment. Also, indicate the job title and availability of personnel who have responsibility for monitoring, measuring, recording, reporting and incorporating related corrective measures. For example, NYS DEC is the oversight agency that has responsibility for polluted storm water from driveways, parking, pad sites and other staging areas that may drain into wetlands, aquifers, and eventually into the Hudson River Estuary—i.e., the Esopus Creek, Hudson River, and connected wetlands. The applicant should include these recommendations specifically into its storm water management and spill accident management plans.

Air Quality / Pollution

Air quality is the measure of the condition of the air expressed in terms of ambient pollutant concentrations and their temporal and spatial distribution. Air quality regulations are based on concerns that high concentrations of air pollutants can harm human health, especially the health of children, the elderly, and people with compromised health conditions. Pollutants also adversely affect public welfare by damage to crops, vegetation, buildings, and other property.

When responding to the questions below referring to the effects on the condition of the air external to the building, we request that the applicant identify and include pertinent information from and about scientific sources, national standards references such as ANSI and OSHA, specific methodologies, and include worksheets as well. In addition, we request that consultants to be hired not be employees of or recent and regular consultants to the applicant or to the Town of Ulster. Professional and experience credentials should be identified for any consultant.

1. Why did the project applicant's Full Environmental Assessment Form (EAF) Part 1 omit identifying and quantifying any emissions whatsoever (D.2.g.ii)? Was this information not required? If it was required, did not the project applicant know the nature of the emissions and/or the volume?
2. Why did the Full Environmental Assessment Form (EAF) Part 2, 6.a.i-vi provide misleading volume numbers for each of five greenhouse gases (for example, "more than 1000 tons/year of carbon dioxide")? Was this information not required to be accurate? If it was required to post realistic volumes, did the applicant not know those volumes or learn what they are between the publications of Parts 1 and 2? Is not the realistic annual tonnage of CO₂ being emitted closer to 35,000 metric tons? What is the science and its sources behind the emissions information reported in EAF Part 2 and the environmental and health impact on human beings, fauna, and flora? Show the full worksheet.
3. At a public information meeting on January 17, the applicant reported on slide #8 that CO₂ emissions from their plant are 195 pounds per megawatt hour. What is the reason behind reporting that misinformation? Since extrapolating the 195 pounds to an annual tonnage rate for the plant running 24/7/365 is 17,082 tons of CO₂, what is the applicant's latest volume number above the threshold of "more than 1,000 tons/year of CO₂" in EAF Part 2 (6.a.i-vi)? We request that the applicant include not just natural gas emissions but also diesel emissions. In the response, show the scientific source, methodology, and full worksheet for all greenhouse gas emissions from the power plant operating constantly--24/7/365.
4. Neither Parts 1 nor 2 of the EAF list some of the kinds and amounts of specific Criteria Pollutants (e.g., nitrogen oxides, carbon monoxide, particulate matter and VOCs) and Hazardous Air Pollutants (HAP) [e.g., mercury, benzene, and formaldehyde) that are present in Draft Scope (7.N.2). Since each of these is deleterious to human, faunal, and floral health, we request from the applicant the specificity of the volume of emissions from the power plant operating 24/7/365 coupled with health-effects interpretations from the New York State Department of Health, the Environmental Protection Agency, and the Department of Environmental Conservation, in addition to the findings from any qualified consultant engaged by the applicant.

5. Since the LPGSC will add pollutants to the local air, we request including in “cumulative impacts” not only all applications of projects filed or approved (Draft Scope 6.P.1) but also existing and operating commercial projects within 5 miles, such as Callanan Industries that manufacture concrete, asphalt and aggregates. We request that the applicant include the impacts on the environment that are added to other past, present, and reasonably foreseeable future actions (including cumulative impacts to surrounding community character and public health and safety).
6. The applicant’s EAF Part 1 and the Lead Agency’s EAF Part 2 mention a brief smell of diesel fuel in the delivery process to the plant. There is no detail about emissions, emission odors, or changes in the noise when diesel is being utilized. Why was this important information omitted? We request the applicant to include both fuels—natural gas and diesel—in their emissions data in their Environmental Impact Statement (EIS).
7. How will the operator of the LPGSC monitor emissions assessments? At what intervals? What will be included in these detailed reports and to whom will these reports be delivered?
8. Because methane leakage is a potent climate forcer and can vary across sites from 1 percent to 9 percent of total transmission, we request that the operator of LPGSC include in their ongoing cumulative site assessment reports of methane leakage that occurs in all oil and gas production, transmission, and distribution infrastructure. The journal *Nature* has reported that rates above 3.2 percent of natural gas combustion become more damaging to the climate than that of coal combustion. Will the applicant agree to do this in an ongoing fashion at regular intervals in their self-reporting? To whom will these reports be delivered?
9. What is the current, pre-LPGSC, quality of the air? How will that change if the LPGSC is constructed and operating 24/7? To accomplish this, we request using macro-scale and micro-scale analyses, requiring:
 - a. A description of existing atmospheric environment. If local data (within 5 miles) is not available, it will be necessary to construct a tower and measure meteorological parameters (temperature, wind speed, wind direction, etc.) at various heights. At least one year’s data is necessary in order to generate wind roses, which are essential for any kind of dispersion analysis.
 - b. A calculation of how much the plant emissions will quantitatively increase the existing background levels of pollutants.

- c. A Gaussian Plume model factoring in stacks of 60, 70, 80, 90, and 100 feet for at least a year to determine a point-by-point impact of the emissions in the areas surrounding the plant at distances of 680, 1500, 3000, 5000 feet, 2 miles, 5 miles.
 - d. The creation of wind maps that examine and report emissions into the air recording prevailing and variable winds of 5, 10, 15, 20, 25, 30, and 35 MPH. On the wind maps, LPGSC would be at the pin point center of widening concentric circles, signifying distances from the LPGSC and the time intervals required to gain those distances.
10. Was the plan for the height of the two smoke stacks lowered from 100 feet to 60, 70, 80, or 90 feet for visual appearance alone? Please explain your answer in detail. If the stacks are at or below the 60-70 feet tree-line, will each of the greenhouse gases and also each of the Hazardous Air Pollutants (HAPs) and Criteria Pollutants have a more deleterious effect on human, faunal and floral life because of lower pollution dispersion opportunity? Please explain the differences in pollution effect of smoke stacks that are 60 feet, 70 feet, 80 feet, 90 feet, and 100 feet? How do these smoke stack heights affect the density of pollution for people living 680, 1500, 3000, 5000 feet, 2, 3, and 5 miles away?
11. What is the quantity of; carbon monoxide, volatile organic compounds, oxides of nitrogen, particulate matter, both PM10 and PM2.5, lead, carbon dioxide and its equivalents and ground level ozone in the air at the Lincoln Park Neighborhood during each season of the year without the construction of the Lincoln Park Grid Support Center?
12. How is the quantity of the same pollutants affected by the various weather conditions that occur within each of these seasons? For example: very hot, humid conditions; humid rainy conditions; dry cold conditions; when snowing; and extreme weather conditions?
13. What will be the expected quantity of carbon monoxide, volatile organic compounds, oxides of nitrogen, particulate matter both PM10 and PM2.5, methane, lead, carbon dioxide and its equivalents, and ground level ozone in the air at the Lincoln Park neighborhood after the LPGSC is running 24/7 on natural gas during each of the seasons of the year? And when running on diesel 24/7? Are these calculations based on mitigating factors in the stacks? Please respond in detail.

14. Since the power plant will be 600-800 feet away from homes. What will the expected quantity of these pollutants be in the air at the homes closest to the power plant after it is built and running 24/7 on natural gas? And running 24/7 on diesel? And the homes 680, 1500, 3000, 5000 feet, 2 miles, 5 miles from LPGSC? And during each season? Many of the homes in the Lincoln Park neighborhood are less than a quarter mile from the proposed power plant. Please respond in detail.
15. How does the weather conditions affect the dispersion rate of these pollutants? And during worst case weather conditions? Please respond in detail.
16. How will the quality of the indoor air of the residents of the Lincoln Park Neighborhood be affected when the LPGSC is running 24/7 on natural gas? On diesel? In worst case weather conditions? Please respond in detail
17. What are the short-term health effects of exposure to each of the pollutants being emitted from the LPGSC when run on natural gas 24/7? On diesel 24/7? Provide detailed answers pertaining to each sector of the population: fetus, infants, children, adults, pregnant women, the elderly, and those who suffer from cardiovascular disease and lung disease including but not limited to COPD and asthma? Please respond in detail.
18. What are the long- term health effects of exposure to each of the pollutants being emitted from the LPGSC when run on natural gas 24/7? And diesel 24/7? Provide detailed answers pertaining to each sector of the population: fetus, infants, children, adults, pregnant women, the elderly, and those who suffer from cardiovascular disease and lung disease including but not limited to COPD and asthma?
19. Should there be another technology used to avoid the air pollution? For example: electrical storage batteries only? Please respond in detail.

Noise

When responding to the questions below referring to the effects of noise external to the LPGSC, we request that the applicant identify and include information obtained from scientific sources and relevant national standards references such as ANSI and OSHA, describe specific methodologies, and provide worksheets.

1. The applicant's EAF Part 1 and the Lead Agency's EAF Part 2 mention a brief smell of diesel fuel in the delivery process to the plant. There is no detail about emissions, emission odors, or changes in the noise when diesel is being utilized. Why was this important information omitted? Please include both fuels—natural gas and diesel—in your responses to requests, questions and statements.
2. In EAF Part 1, Endnote 3 Indicates the “operation of the proposed facility may generate noise above local ambient levels. The facility is typically designed to result in noise levels of 50 dB (+/- 5 dB) at the fence line. All outdoor equipment will be specified with a maximum dB requirement (typically 85 dB at 3 feet)
...the area between the facility and other structures [residences at 680 feet] is forested. Therefore, the proposed project is not expected to result in noise impacts on adjoining properties.” At the very least, this information requires more clarity; at worst, it is deliberately misleading. Does Endnote 3 of EAF Part 1 mean 50dB is the value at the fence line from noise generated from inside building and the outdoor equipment may generate an additional noise value of 85 dB and the applicant is relying on trees to dampen that cumulative noise to a negligible noise impact? Please explain maximum cumulative noise volume in clear detail under a worst-case scenario of plant operations in a forest when the trees are bare of leaves and during the hours of 10PM to 7AM. In your answer, please acknowledge the Town of Ulster's Town Code (117-3, 4, 5) which specifies a maximum noise level of 72 dB during the hours of 7AM-10PM and 66 dB during the hours of 10PM-7AM.
3. Noise is considered unwanted sound that can disturb routine activities (for example, sleep, conversation, and student learning) and can cause annoyance. We request that the applicant submit details on all specifications for the LPGSC generation equipment—the gas fired apparatus, diesel reciprocating engines and lithium-Ion batteries. These noise studies should specify:
 - a. The locations to be screened: In addition to what is currently in the Draft Scope (VII.G.1,2) pertaining to visual impacts, include noise studies of the project site from the four neighborhoods (Fox Run, Sunrise Park, Ulster Gardens, and Old Flatbush) immediately bordering the project site: top of Perry Road, Van Kleecks and Quail Drive, Van Kleecks and Cora Road, Cora Road and Warren Street, Warren and Riseley Streets, Riseley Street and Ledge Road, Ledge Road and Quail Drive, the northeastern edge of Ulster Gardens, and the northwestern and southwestern edges of Old Flatbush Road.

- b. We request that the applicant specify and include the noise levels inside the LPGSC building and immediately outside the building under a worst-case scenario of operating conditions. Sound measurement standards and protocols should be used and should include sound attenuation. Low-frequency noise and potentially negative impacts on hearing, especially for the elderly, should be measured and considered. (The average hearing person can detect a change in noise of 3 dba.)
 - c. We request that the applicant specify and include noise protocols and regulations for employees. Please respond in detail.
 - d. We request that the applicant specify and include the cumulative effect of all noise produced by LPGSC. Please respond in detail.
 - e. We request the applicant and any consultant be conversant with and follow the NYSDEC program policy document entitled *“Assessing and Mitigating Noise Impacts”* on all expected noise levels.
4. What are the current and expected ambient noise levels in dba at the homes 680, 1500, 3000, 5000 feet, 2 miles, 5 miles from the site where the LPGSC would be built? For the same distances, what are the amplitude, frequency, impulse patterns and duration of this ambient noise? Provide measurements for each of these during day and night and during summer (full foliage), fall, winter (no foliage), and spring? Describe in detail the increases for these figures between current and expected and their expected impact on human beings at these distances.
5. What are the impacts of this increase in noise on pets in the same ranges as above? Please respond in detail.
6. What are the impacts of this increase in noise on wildlife, including but not limited to birds, other animal life, and Long-Eared Northern Bats and Indiana Bats in particular? Please respond in detail.

Odors

1. The burning of diesel causes a high degree of greenhouse gases, HAPs, and noxious, odoriferous fumes. The LPGSC will have 50,000 gallons of diesel at any given time to be used when there is an interruption of natural gas. We request that the applicant include both odors due to combusted diesel and combusted natural gas. Also, we request that the applicant refer to the specific science used, the methodology, and worksheets. The applicant's EAF Part 1 and the Lead Agency's EAF Part 2 mention a brief smell of diesel fuel in the delivery process to the plant. There is no detail about emissions, emission odors, or changes in the noise when diesel is being utilized. Why was this important information omitted?
 - a. Why does the applicant need 50,000 gallons of diesel present on the project site? Please explain in detail the rationale for this much storage relative to a reliance on natural gas. Does the applicant expect frequent interruptions? Does the applicant expect to operate on diesel when there are no natural gas interruptions? If so, explain why and with what frequency?
 - b. Explain in detail the use of additives to diesel? What are those additives? How will they be stored on site? How frequently will they be used? What is the cumulative effect on the emissions from each of the additives with diesel on greenhouse gases, Hazardous Air Pollutants emissions, and Criteria Air Pollutants?
 - c. What is the useful life period of stored diesel with and without additives. Depending on that useful life, would there be an incentive to burn diesel for reasons other than unavailability or interruption of natural gas?
 - d. Would it be safer to store fewer gallons of diesel (for example, 5,000 gallons) to contain potential spills more easily, mitigate the degree of catastrophe in the event of a fire, spill or leakage, and dissuade regular use of diesel for reasons of greater pollution and noxious odors? Please explain your answer in detail.
 - e. Since the LPGSC intends to top-off its diesel tank regularly to maintain the 50,000 gallon-level, adding new petroleum into stored petroleum, what plan do you have to burn diesel as effectively and cleanly as possible?

2. Town of Ulster Town Code (§ 95-4) states that “No person shall carry or leave, or cause to be carried or left ... any material, waste or offal [byproduct] of any kind which shall give off any offensive odor..., or creates or may thereafter create a nuisance of any kind or which shall be or may become dangerous to human or animal life.” We request the applicant to elaborate on the science and methodology that mitigates the offensive smell produced by combusting this noxious fuel.
3. Competitive Power Ventures (CPV) natural gas/diesel plant in Wawayanda NY—one county to the south of Ulster County—has been burning ultra-low sulphur diesel exclusively because they have no natural gas availability. The *Times Herald-Record* has reported on the extreme dissatisfaction by residents, businesses, and politicians regarding the smell of diesel and its noxious effects on respiratory health, eyes, and skin as far away as a few miles. CPV claims to be doing this legally and with full authority. This power plant is much larger than the proposed LPGSC, but the effects, except for the volume, would be the same on the nearby human health and olfactory sensitivities as well as on faunal and floral life.
 - a. Is it true that you have no control over how much the Independent System Operator (ISO) managing the grid will use the LPGSC, and that you cannot assure our Town how often and over what duration the LPGSC will burn diesel? Please answer in detail.
 - b. From a noxious smell perspective, we request that the applicant explain to the Town’s citizens the quantity and intensity of burned diesel’s odoriferousness at 680 feet, 2000 feet, 5000 feet, 2 miles, 3, 4, and 5 miles away from LPGSC under the worst-case scenario of operating solely on diesel during a season of leafless trees. Use the same wind maps we requested under the subject of “Air.” We further request that the applicant reports the tonnage of diesel greenhouse and HAP emissions (showing the science, the methodology and the worksheets). Please translate the findings into analogies that a layman might understand, such as likening the LPGSC diesel emissions to that of a certain number of diesel-powered busses. In the February 24, 2018 edition of the *Times Herald-Record*, [a woman’s name], who lives two miles from the power plant [said]...the smell...was tremendous, as if a big bus idling right in front of my house with choking fumes.” Most of us know what a diesel bus smells like. Use another analogy if you think it more useful.

4. Because, the applicant's proposal identifies 50,000 gallons of diesel, any reasonable person would assume that the applicant is prepared to use it in great volume. Objecting to the potential insult to health and great annoyance of this combusted fuel, we request that the applicant remove diesel altogether from their proposal since the LPGSC has already included battery storage.

Water, Fauna, Flora

1. Regarding the SEQR term "mitigation," we request that for purposes of greater clarity the applicant's DEIS use a hierarchy of impacts: avoid (first), minimize (second) and mitigate (third). Although SEQR requires mitigation to be used as a consideration for DEIS, there are precedents for using a hierarchy that sets avoidance and minimization as priorities.
 - a. Avoidance means selecting the least-damaging project type, spatial location, and extent compatible with achieving the purpose of the project. Avoidance is achieved through an analysis of appropriate and practicable alternatives and a consideration of impact footprint.
 - b. Minimization means managing the severity of a project's impact on resources at the selected site. Minimization is achieved through the incorporation of appropriate and practicable design and risk avoidance measures.
 - c. Compensatory mitigation means replacing or providing substitute resources for impacts that remain after avoidance and minimization measures have been applied, and it is achieved through appropriate and practicable restoration, establishment, enhancement, and/or preservation of resource functions and services).
2. Under the SEQR consideration of cumulative impact, segmentation (617.2 ag) and forest fragmentation, the potential effects on "streams, tributaries, storm-water, wetlands, steep slopes, wildlife, and wildlife habitat" (Draft Scope) require close and detailed study. We request that the applicant engage qualified hydrologist consultants to provide impact studies in all of these areas that will include but not be limited to:
 - a. Prepare and share a complete Storm-Water Pollution Prevention Plan since "polluted runoff may impact...wetland and other waterways in a variety of ways." See <http://townofulster.org/content/Stormwater00/View>.

- b. The existence, location, and dimensions of a karst aquifer, which may be present even when there are no known and accessible caves. Karst topography is characterized by calcareous rock with underground drainage systems with sinkholes and caves. Forty percent of all groundwater used for drinking comes from karst aquifers. They are particularly vulnerable to contamination because karstic conduits transport water rapidly.
- c. The existence, location, and dimensions of vernal pools associated with forested wetlands which, according to Hudsonia, are themselves endangered. They are also called seasonal woodland pools because they are breeding grounds for amphibian life—wood frogs, spotted and eastern tiger salamanders—that also serve as an important food source for small and large carnivores within a balanced ecosystem. These pools need to be delineated by a certified wetlands specialist especially in the spring. The U.S. Army Corps of Engineers or qualified wetlands expert can verify and map a complete wetlands delineation. We ask the applicant to make this formal request or engage a qualified wetlands expert to verify, delineate, and map these areas.
- d. The effects of hazardous air pollutants, criteria air pollutants, noise, and artificial light not only compromise all faunal health but encourage them to flee, eventually leaving the forest over-run by rodents and ticks, giving rise to the incidence of Lyme disease. Studies must identify the vulnerabilities of all fauna that navigate along the ground and in the air and the vulnerability of all species of flora.
- e. The inter-connectivity of all the forest's wetlands and aquifers with other moving waters in the region waters. The Lincoln Park forest is a sensitive Eco structure subject to fragmentation by the introduction of development which adds pollution. This forest is “substantially contiguous” (617.4.b.9.10) with other forested areas by a large stretch of running water beyond Route 199 and to the Hudson River.
- f. Forest fragmentation breaks the connections of biodiversity necessary for an ecosystem to survive. Include the Carey Institute for Environmental Systems in Millbrook NY as an excellent local resource on this topic.
- g. Region 3 of the NY Department of Environmental Conservation (DEC) is a resource for information as well as environmental permits regarding endangered species in the Lincoln Park forest, such as the Northern Long-Eared Bat and the Indiana Bat and their roosting trees. In addition, we request the applicant to ask the same resource or qualified biologists to explore the area for endangered species of turtles.

Visual Impacts

1. In addition to what is currently in the Draft Scope (VII.G.1,2) pertaining to visual impacts, we request the project applicant include the visibility of the project site with smoke stacks up to 100 feet in height visible from all of the listed vantage points with and without foliage (that is, summer and winter). In addition, include views from the four neighborhoods immediately bordering the project site: top of Perry Road, Van Kleecks and Quail Drive, Van Kleecks and Cora Road, Cora Road and Warren Street, Warren and Riseley Streets, Riseley Street and Ledge Road, Ledge Road and Quail Drive, The northeastern edge of Ulster Gardens, and the northwestern and southwestern edges of Old Flatbush Road

Cost / Benefit Analysis

1. Some clarifying questions about information not evident in the proposed LPGSC:
 - a. How will the project applicant guarantee the financial stability to complete construction, safe operation, maintenance, prevention of soil contamination, and payment of taxes?
 - b. In addition, what will be the amount of performance bond to be posted?
 - c. When will the applicant develop a secure contract to sell electricity to the grid? Explain your confidence to bid successfully if you haven't done this before?
2. Benefits to the Town of Ulster and its citizens (cf., V.E.3) include but are not be limited to the following questions, statements and requests:
 - a. What are the specific sources and amounts of benefit, financial and otherwise, to the Town from every aspect of its relationship to the proposed LPGSC? How, when, under what circumstances and with whom have these benefits been discussed and perhaps agreed upon? Please provide complete details in your answer.
 - b. We request that the applicant identify in detail the existing revenues and taxes generated from the three properties comprising the project site related to all applicable jurisdictions – Town, County, School District and any special districts affected.

- c. How much money from taxes and value from other agreed actions (for example, land, rights of way, public works services, deed restrictions, gifts) would the Town realize in all agreements between the Town and the LPGSC applicant? How, when, under what circumstances and with whom have these financial and other benefits been discussed and perhaps agreed upon? Please provide complete details in your answer.
 - d. Is there an application or a plan for application by the applicant for payment in lieu of taxes (PILOT)? If so, explain the basis for such an application. Was the possibility of a PILOT discussed with anyone representing the Town of Ulster? If so, what was the exact amount and timing of the PILOT? Explain in detail the amount and term of the application or proposed application for a PILOT and compare the amount of PILOT to that which would be received on a taxed basis over the same term as the PILOT. Provide the methodologies used for both along with all work-papers.
 - e. Regarding the development of the LPGSC, who personally benefits in the Town in any way, directly or indirectly, with any and all aspects of this project? Please explain with specificity.
 - f. From a zero-sum perspective, identify who and what will lose value (for example, personal health due to toxic emissions, community character, property values, faunal and floral life, ecosystem balance) in what manner and to what degree in the short term (one year) and long term (10 years). Answer with specificity.
 - g. Residents in the Fox Run, Sunrise and Old Flatbush neighborhoods near the LPGSC site intend to engage a residential appraisal professional to assist in filing for property tax reductions due to any change in neighborhood character. Assuming that these reductions on approximately 160 homes could range from 20% to 50%, does the applicant believe that the LPGSC is a net benefit to the Town? Please explain your answer in detail.
3. Benefits to the applicant include but are not be limited to the following questions, statements and requests:
- a. What are the complete project development, construction, equipment, and fuel costs to the applicant to open the power plant for business? What are the first twelve months of anticipated and budgeted annual revenues and costs that include but are not limited to the sale of power, any additional receivables (for example, fees related to power readiness), personnel, benefits, maintenance, plant utilities, contracted services, natural gas, diesel, insurances, direct and indirect overhead, projected ratio of current

assets to current liabilities, and lending institution covenants, and other payables? Please answer in detail with explanatory spreadsheets.

- b. Excluding the first year of operation, what are the anticipated gross, net and net-net financial benefits of LPGSC in each of the first ten years of operation? Please answer in detail with explanatory spreadsheets.
- c. How much does the LPGSC intend to pay in local taxes in each of the first ten years of operation?
- d. If there is a payment in lieu of taxes (PILOT), how much does LPGSC intend to pay in each of the first ten years of operation?
- e. Even though the applicant has nearly all of its experience in renewables energy, how is the proposed project financially beneficial and how is the applicant's mission germane to fossil-fuel generation at a time when forward-thinking energy generation is moving closer to that which the applicant has been committed until now? Please explain in detail.
- f. Are there any direct or indirect financial benefits or non-financial benefits planned for any other entity or persons besides the applicant, the electric Grid itself, and the Town of Ulster including but not limited to the State of New York, Ulster County, Ulster County Resource Recovery Agency, and any of the local emergency responder entities? Please answer in detail, naming each of the other entities and persons along with the financial and non-financial benefits for each and their purposes.

Community Character and Cultural Resources

The LPGSC would change the community character of four residential neighborhoods (Fox Run, Sunrise, Old Flatbush and Ulster Gardens) that border its western and southwestern frontage, by as little as 680 feet, demonstrating that “community character relates...to how people function within, and perceive that community” (DEC’s SEQR Handbook, 3rd edition, Chapter 4, p. 87).

1. “LPGSC as proposed would dramatically diminish the quality of air by releasing volatile organic compounds, oxides of nitrogen, and other hazardous air pollutants in close proximity to residential neighborhoods,” according to energy economist and consultant Evelyn Wright. The LPGSC would also add unwanted noise and odors from its power plant. Does the project applicant have any scientific evidence to demonstrate that the LPGSC would improve the air local citizens breathe or produce negligible toxic effects to the immediate air and atmosphere? In answering, please refer to questions on air emission testing, noise, odor, and environmental impact questions and requests elsewhere in this document.
2. LPGSC would negatively affect the air breathed by citizens who live close to the proposed power plant whose respiratory systems are vulnerable. Does the project applicant have any scientific evidence to demonstrate that the LPGSC would, as claimed in EAF, produce negligible toxic effects on persons of advanced age, persons with respiratory diagnoses, and children who walk and play in the immediate neighborhood?
 - a. At the Town Board Scoping Meeting on Feb 22, 2018, Sandra Pierson, a resident of nearby Ulster Gardens, testified that “Ulster Gardens Court has 161 units, mostly elderly and disabled individuals. Many already have COPD and other breathing conditions. I am extremely concerned about emissions.... This is an extremely fragile group of people.” We request that the project applicant address the emissions in a manner suggested elsewhere in this document under “Air” emissions testing and “Environmental impacts” as they affect people in fragile health at a distance approximately 1500 feet south of the LPGSC at an elevated position with an unobstructed view of the LPGSC.
 - b. Similarly, many of the residents in Fox Run and Sunrise, especially along Ledge Road and Riseley Street are a mix of senior citizens, a group home for adults with developmental disabilities (Perry Hill), and young families. A residence on Riseley provides day care to a group of very young children who are walked in the neighborhood. Our request for these people in the community is the same as above (a).

3. Residents of Fox Run, Sunrise, and Old Flatbush intend to use, collectively, the services of a professional residential evaluator to determine the percentages of value loss to properties due to the relative proximity to the LPGSC's air pollution, noise, odor, visual perspective of smoke stacks and their plumes, and other environmental impacts discussed elsewhere in this document. We request that the applicant engage a professional residential valuation service that has no business or personal affiliations with the applicant, Town of Ulster officials or employees, or other conflicts of interest, and we request that the applicant share the information with the citizens of the above-named three neighborhoods.

4. Town of Ulster Subdivision Code, § 161-22, on Reservations and Easements points out: "In accordance with § 277 of the Town law, the Planning Board may require either the reservation of land for a park or recreational purposes or payment of money in lieu of land to a trust fund to be used exclusively for a neighborhood park, playground or recreational purposes, including the acquisition of property." Fox Run Townhouses and Sunrise Park subdivisions are a tight constellation of approximately 140 homes that pay a significant amount of taxes and have never received the consideration of open space or parkland. Instead, our subdivision faces further encroachment—this time posing the threat of imminent danger (addressed elsewhere in this document). The *recommendation stated in the Town's Comprehensive Plan 11.8.4 Subdivision Regulations* is to "Require the use of a cluster subdivision where such use would protect important vistas or protect environmentally sensitive areas." Because the LPGSC would border two subdivisions, we request the project applicant review the Town of Ulster's Comprehensive Plan Implementation Plan, especially #s 1, 2, 3, 5, 6, 20, 23, and 49 (pp. 102ff.) and Subdivision Code and explain in detail how the LPGSC enhances, detracts from, or has no effect on the community character of residential subdivisions adjacent to the proposed power plant.

5. Cultural Resources, such as Native American archeology, must be respectfully preserved by the project applicant. We request that the project applicant formally consult with consultants in Native American archeology who will conduct sensitive archeological explorations and digs especially at and near the entire project site to determine if there is evidence of any of archeological significance before any construction or disturbance to the area begins. We further request that these findings be made public before any construction or disturbance to the area begins.

Reasonably Foreseeable Catastrophic Impacts (NY-CRR 617.9(b)(6)

1. From a safety perspective, why would the applicant propose a fossil-fuel-fired plant complemented by potentially explosive lithium-ion batteries, mostly unmanned, in the middle of a forest which may be subject to external threat from natural causes or vandalism? In your answer, please explain in detail how your reasoning extends beyond proximity to both natural gas and power lines to situating a power plant in a secluded location vulnerable to potential disaster, externally and internally. Shape your response using a graduated plan: avoidance, minimization, compensatory mitigation, response, and recovery.
2. Under the SEQR rubric of “unforeseeable catastrophic impact,” has the applicant planned for the possibility of such an event and assessed the likelihood of its occurrence (CRR-NY 617.9.b.6)? “Ulster County Comprehensive Emergency Management Plan” (UC-CEMP) <https://ulstercountyny.gov/sites/default/files/CEMP%202014%20Final%20%20Edition%204.11.14.pdf> pivots on four actions in an ordered progression—prevention, mitigation, response, and recovery. Please answer in detail how you have shaped your plan from each of these four perspectives.
3. Since Hazard Analysis in UC-CEMP is a “process of systematic investigation of potential disasters in terms of frequency, magnitude, location, and probability of occurrence, to forecast their possible effects on the people, systems, facilities,” and natural resources, we request the applicant to conduct a detailed Hazard Analysis.
4. We request that the project applicant engage a certified, disinterested, third-party consultant to conduct a Vulnerability Assessment that considers the UC-CEMP and the “Ulster County Multi-Jurisdictional Natural Hazard Mitigation Plan” representing the collective efforts of the county and twelve participating jurisdictions, including the Town of Ulster. “The continued implementations of this Plan will gradually, but steadily, lessen the impacts associated with hazard events” (Exec. Summary ii <https://ulstercountyny.gov/sites/default/files/documents/Ulster%20County%20Final%20Hazard%20Mitigation%20Plan%20Feb2009.pdf> . Consider these facts in your assessment:
 - a. Forest fires were ranked 10th out of 27 moderately high hazards among the list of all hazards included in the Ulster County HAZNY study.
 - b. “According to available GIS data, approximately 70% of the county area is forested, and wildfire hazard risks are expected to increase as development along the urban/wildland interface increases” (Section 2, 13 <https://ulstercountyny.gov/sites/default/files/documents/Ulster%20County%20Final%20Hazard%20Mitigation%20Plan%20Feb2009.pdf>

- c. Development trends regarding wildfires: “Areas typically considered prone to wildfires include large tracts of wild lands containing heavier fuels with high continuity, at steeper slopes—particularly those that are far away from firefighting apparatus.” and hence [posing] an increased risk of future property damage and public danger due to wildfires” (Section 3d, 8).
 - d. Wildfires are part of the natural management of forest ecosystems, but most are caused by human factors. Over 80 percent of forest fires are started by negligent human behavior such as smoking in wooded areas or improperly extinguishing campfires. The second most common cause for wildfire is lightning” (Appendix 2.1 <https://ulstercountyny.gov/emergency-services/hazard-mitigation/draft-plan-update>)
 - e. Ulster County’s Priority Risk Index (PRI) for wildfire in the Town of Ulster without the proposed Lincoln Park Grid Support Center power plant (Appendix 3E.1 <https://ulstercountyny.gov/sites/default/files/documents/emergency-management/3e.1%20ULSTER%202017%20Appendix%203e.1%20FINAL.pdf>)):
 - 1. Hazard Ranking: Medium
 - 2. Probability: Possible
 - 3. Impact: Critical
 - 4. Warning Index: 4 (scale 1-4)
5. If the applicant does not avail itself of Ulster County’s disaster preparedness services, what objective methodology will it use to perform a hazard analysis, a vulnerability assessment, and a preparedness plan for fire involving high-pressure natural gas, 50,000 gallons of diesel, and 121 acres of biomass bordering a residential area of approximately 160 homes? Please be very specific and detailed in your response.

Alternatives

- I. Since the range of alternatives may include the No Action alternative [617.9 (b)(5)(v)], sites, technology, scale, design, timing and use, we request that the applicant take no action on their proposal for the following reasons:
 - a. The project applicant has no experience with fossil-fuel energy generation power plants and we do not wish for the applicant to learn at Town of Ulster citizens' expense. We request the applicant agree or provide detailed reasons behind their conclusions to the contrary.
 - b. Natural gas and diesel generation peaker plants are in the process of being replaced and rendered uncompetitive and obsolescent by electric storage due to FERC Order Number 841 issued on 02/15/ 2018 which removes competition barriers to electric storage that receives and returns power to the grid. We request the applicant agree or provide the detailed reasons behind their conclusions to the contrary.
 - c. NYISO released a statement in December 2017 that concluded that three large power plants—CPV in Orange County, Cricket Valley in Dutchess County, and an expansion in Bayonne, New Jersey—will, when fully developed, over-fill the power void left by the dissolution of the Indian Point nuclear plant, thus rendering the LPGSC un-needed. We request the applicant agree or provide detailed reasons behind their conclusions to the contrary.
 - d. LPGSC would alter the balance of a sensitive ecosystem, causing forest fragmentation of its vernal pools, other wetlands, a principal aquifer that articulates to regionally active waters. Birds and larger animal life, assaulted by power plant noise, air pollution and artificial light pollution, would be encouraged to abandon their habitat leaving a forest over-run by rodents and Lyme disease-bearing ticks. We request the applicant agree or provide the science behind their conclusions to the contrary.
 - e. The Town of Ulster would not directly benefit from the applicant's peaker plant because the Town's usage has remained fairly flat for the past three years; rather downstate counties within our grid zone would directly benefit at our Town's environmental expense—the Town's clean air and unsullied forest would be unnecessarily sacrificed for the profit of the applicant. We request the applicant agree or provide detailed reasons behind their conclusions to the contrary.

- f. A reasonably foreseeable catastrophic impact [617.9(b)(6)] to human and faunal and floral life due to a fossil-fuel-fired power plant, mostly unmanned, remote, in the middle of a forest which may be subject to accident or external threat from natural causes (for example, fire) or vandalism. We request the applicant agree or provide detailed reasons behind their conclusions to the contrary.

- II. A second reasonable alternative for the project applicant is timing—to take No Action now but rather to take action on a renewables technology [617.9(b)(5)(v)b] in the near future when New York State’s imminent energy rules on clean energy and electric storage will be released. We request the applicant agree or provide detailed reasons behind their conclusions to the contrary

- III. A third reasonable alternative is to couple a renewables technology with safe electric storage on a project site slightly different from among the three parcels the applicant intends to acquire:
 - a. The applicant intends to purchase three parcels Section 48.12 Block 1 Lot 20, Section 48.16 Block 1 Lot 1 and Section 48.16 Block 1 Lot 2.210. Parcel Section 48.12 Block 1 Lot 20 is located at the entrance to the Town of Ulster’s Transfer Station and is adjacent to power lines with a power line pole fixed at the parcel corner and Miron Lane. We recommend that the applicant consider using this parcel and adjoining Town of Ulster parcel to establish a solar array with electric storage to be used for the benefit of the Town of Ulster electrical needs.
 - b. There are a few large, open parcels in the Town of Ulster for sale along the Route 209 corridor north of the Kingston traffic circle, west of the NYS Thruway (Rt. 87). They are also very near the power lines. We encourage the applicant to inquire about parcel SBL 48.10-1-3. Since owner is ready to discuss a sale, we request the applicant to pursue this alternate site prospect.

- IV. We propose a fourth reasonable alternative; namely, that the applicant revisit the other properties they explored for the same purpose—a 20 megawatt peaker plant in the New York State. We request the applicant reveal all alternative properties explored prior to their current choice and explain in detail why they rejected each of those other options in favor of the Lincoln Park site.