May 29, 2012
Honorable Jaclyn A. Brilling Secretary
NYS Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350
Re: Case 12-F-0036 In the Matter of Rules and Regulations of the Board on Electric Generation Siting and the Environment, contained in 16 NYCRR, Chapter X, Certification of Major Electric Generating Facilities
Dear Secretary Brilling,

I am in agreement with the submission by Dr. Alice Sokolow and I am hopeful that the thoughtful and well researched positions stated in the following submission will influence the final regulation.

Nancy Wahlstrom
Resident of Prattsburgh, NY

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Dear Secretary Brilling,

The proposed Article 10 Draft regulation process by the Department of Public Service has been an honest attempt at collaboration. If the Regulations are strengthened then it may help compensate for the overt flaws and misrepresentation of the good people of NYS in the actual law. Thank you for including me in this process.

The opposing viewpoints for the proposed requirements mainly focus on wind power. Wind power has unique parameters and impacts, unlike any existing generation under the old Article X. Added to this, is the impetus to comply with the NYS Energy Plan which emphasizes reliability and cost effectiveness, while “greening” and upgrading our energy supply. Finally, the inclusion of Article 10 regulations upon already existing plants not currently under the old Article X, including Renewables, and their future compliance with expansion of generation and/or footprint. This daunting task, having such a very short time frame of completion of August 4, has been placed upon the DPS and DEC. I again thank the Department of Public Service for their continued collaboration in writing these specific requirements.
Please find my additional input into the new Article 10 with focus on wind power:

1. The earliest possible public involvement is crucial to Article 10 and to the value of "public service." It takes time and diligence from the public to understand the complexities, jargon, and impacts of the PSL Process and to acquire the skill to communicate public concerns in an appropriate timeframe and manner to be in compliance under the PSL. The same is true for impacted and adjacent municipalities that are responsible for public health and safety, and minimizing negative economic impact.

Quite simply, as soon as a developer initiates communication with a NYS agency/quasi-agency or municipality involving potential Article 10 projects, the public communication should start. This should be inherent in the open government process of any NYS agency, by definition. Coordination of Article 10 requirements to minimize the time frame, falls heavily upon the developer and their coordinating team and is totally dependent on the complexity and expansiveness of the project. Shortening public input that runs parallel to the process should not be considered a time saver.

There should also be a limit upon the length of time the developer can delay a phase of a project (some are currently approaching 10 years on the NYISO interconnection queue with multiple changes to location and turbine type).

Along with Article 10 compliance and open government, there should be the implementation of the spirit of the then, Attorney General Cuomo's Conflict Disclosure and NYS Code of Conduct. This can and should be easily applied to all developments, not just wind, and fines should be attached to noncompliance. In the past, much of wind development planning transpired without early public knowledge and the public input was minimal.

Additionally and most definitely, all meetings and hearing should be held in the impacted community.

2. Land use is usually part of a municipality's comprehensive plan. This requirement in Article 10 supports Comprehensive Planning and intra-agency (NY DEC, Ags & Marketing, SHPO) input and coordination. It should absolutely remain in Article 10.

This requirement should also allow for completion of any changes that are under review or under a current moratorium at the municipal level. The developer should be aware that municipalities do not stop planning at the first signs of development and should not utilize Article 10 to thwart the municipality's predetermined actions.

This section also clarifies the actual ownership of the proposed development, eliminating the potential for over use of Eminent Domain. If the developer complies with the spirit of SEQRA, they should have no difficulty with complying with 1001. Article 10 should never be used to diminish the spirit of SEQRA. Additionally, the developer should expect to update or supplement this section, if the project is delayed or changed. Any delays should not be allowed to thwart the municipalities' progress. A "no action" or stalling by the developer that negatively impacts the economics of the municipality and disrupts the progressive continuum of involved and adjacent municipalities should not be allowed. A mitigation plan should be required for any delay and a time limit should be instituted, unless an enforceable ample claw back with another NYS Agency already exists and is enforceable by or at the request of the Board.

3. Any time a developer receives Federal, State, NYS Agency/quasi-agency or other public funding (relief of taxes in PILOTs) or is involved with a NYS Initiative (RPS) where there is preferential treatment, the public is entitled to information that involves the developer’s compliance and appropriate use of public funds.

As with wind power, the developers previously did not always correctly
select locations that had optimal wind, nor did they select turbines that matched the wind source, nor did they prove the ability to deliver the energy to its promised destination. Previously, the wind data was simply proprietary, the generation measure that was utilized was qualitatively (in terms of houses), and the projects were built at known bottlenecks, or transmission were shared with known diminished productivity. With preferential treatment, the renewable generation is basically unbundled from its qualitative characteristics and bought by "dirty" producers. Profits are not always tied to generation. Without wind data and cost analysis, the new Article 10, could be misused to help hide inappropriate allocations of public funds.

Another problem with preferential treatment with the renewables is the Bonneville situation, where ratepayers are paying for not generating wind and simultaneously paying for generation of hydro as well as paying the Federal penalties involved. This must be prevented from happening in NYS. Globally, the ratepayers and public are being severely monetarily impacted and manipulated by the current tithing-like systems of buying cleanliness. The New Article 10 can easily strengthen and protect the public right, while setting a globally responsible progressive precedence and example. Article 10 should strive to comply with the reliability and cost effectiveness that is required in the NYS Energy Plan. There should even be a factor in the longevity of the project applied to its cost effectiveness. Wind turbines have a much shorter life expectancy than advertised; some by as much as half.

The NY PSC has typically allowed conditional lightened regulations, with requirements: no negative impact upon the ratepayers, no vertical or horizontal market power, and the reporting of change in structure or ownership of the electric corporation under PSL Section 70. This should continue if lightened regulations are considered for the project. With all the hedging, Holdco formations, doubling and unbundling of REC's, it is extremely difficult for the NY PSC to determine ownership and uphold its fiduciary responsibilities to its ratepayers. Separation of generation and transmission becomes murky at best; ownership is not in the strictest sense, an arm's-length transaction and energy decisions are not in the strictest sense independent. Example: Maine PUC Case ID 2011170 requiring additional checks and balances and conditions for acceptance.

4. Municipal Laws should be upheld to the greatest extent possible. Each municipality has its own unique environment, economics and history. No cookbook or cookie cutter definition of burdensome should be used. The PSC should not "override" local law under the new Article 10 standards especially when it involves land intensive wind farm projects with intermingled nonparticipating landowners. It diminishes the sanctity of Municipal Home Rule and Municipal Comprehensive Planning. It usurps the municipality's responsibility of public health and safety and it strips all nonparticipating landowner rights.

Additionally, it is unclear to me if under Article 10, the NY PSC will be in charge of monitoring and compliance issues or will the municipality? Example 1: When there is excessive noise emanating from a gas pumping station, the NY PSC hires an independent acoustical engineer. Example 2: When a turbine collapses, the NY PSC monitors the situation. Example 3: When we hear poorly functioning turbines in the adjacent municipality, nothing happens!

5. Substantial Changes and Modification- The 500 foot change in turbine location should not be allowed especially when impacting a nonparticipating landowner. The 500 foot assumption is that all surrounding land is under control of the developer which is especially not true with wind; land ownership is almost always intermingled with impacted non participants. Considering the fall zone and over 100 dB emanating from turbine, the 500 foot change could significantly impact and harm non participants; the
"pawns" in a game of chess. If changing the turbine location by 500 foot had no impact on adjacent nonparticipating landowners and the SEQRA-like compliance plan is not changed, especially for noise, shadow flicker and public health and safety, then and only then, could a modification be considered.

Potential Quick" Rule of Thumb":
The National Wind Coordinating Committee in 2002 came up with a Permitting Guide and "rule of thumb" for minimizing impact when advising leaseholders that was 25 acres per MW. This has since been removed.
Trade Wind, a Wind Harvesting Company in Kansas utilizes 50 acres per MW and states compatible land uses as farming or ranching for the land not occupied by the footprint.

How much land is needed for a utility-scale wind plant? In open, flat terrain, a utility-scale wind plant will require about 50 acres per megawatt of installed capacity. However, only about 1-2% of this area is actually occupied by turbines, access roads and other equipment. The rest remains free for other compatible uses such as farming or ranching. The point is that many already existing wind projects in NYS do not utilize a land to MW rule of thumb. Using hindsight, this may have minimized negative impacts and complaints. Since before 2003, PACE was involved with NWCC's Best Practices and Permitting, I find it difficult to comprehend why NYS did not have that knowledge.

Please consider choosing a FIRST rule of thumb that would also take into consideration the re commissioning of larger turbines at the project; saving the developer future money, saving the nonparticipating landowner from negative impacts and saving the siting board time and money.

6. Study Areas requires a 5 mile study radius around all generating facilities.
This should remain.
A list of potentially sensitive historic sites should be supplied to SHPO.
Bird/Bat studies for flyways should be detailed to FWS and NY DEC.
The 5 mile radius should remain and apply early in the process. The NYS intra agency coordinated review will set the parameters for the detailed studies required by the 5 mile radius tailored to the project. The studies do not necessarily require right of entry as was one rational for abolishment of the requirement.

7. Sound- There are many articles on sound impacts from wind turbines that have been completed by acoustical engineers. Many have consistent parameters and conditions to be met when measuring wind turbine noise. Besides accepting the NY DEC Assessing and Mitigating Noise, and the WHO's guidance on night noise limits, it behooves the NY PSC to hire the acoustical engineers that typically measure complaints filed with the NY PSC, to research and set the parameters for wind farms. The DPS and DEC can then bring these parameters, based on research, back to the stakeholders and NY DOH for comment.
An excellent review containing many resources can be found at:
http://theenergycollective.com/node/84293

Simple “Quick & Dirty” solution - Do the wind studies under the worse-case scenario- no wind plus external generator noise plus blades turning for maximum wind speed for noise plus terrain under no leaf conditions. Computer generation needs to be for worse case situations and more than one turbine speed; this is NOT how it has been typically completed in the past. This will help take into account the reality we have at our locality where the generators are frequently to almost always running to turn the turbines blades when there is no discernible wind.
The "other" worse-case scenario we experience in an adjacent municipality is turbine noise when the turbines are in need of repair. How long should turbines run without repair or remediation? Who should monitor this? I can guarantee that self-monitoring does not work!
Just maybe potential solution #5 may help solve problem #7. Ample distance is determined by the inverse square for noise.

8. Health & Safety
OSHA regulations for employees should set the standard for public health and safety. Prototype turbines (see certification) should have additional setback requirements.

Hard hat areas, hearing protection and safe setbacks for turbine blade breakage, fall zone and ice throw and other project specific parameters should protect the public health and safety as well as the liability of the municipality and NYS.

Shadow Flicker duration for sensitive receptor and all nonparticipating landowners should be mapped. No one should be forced to stay in their house with "special" light blocking blinds to decrease their exposure. New Study Needed: Driving with shadow flicker as compared to using a cell phone.

9. Wind turbines do not fall under the NYS Building Code. I have written repeatedly to the DOS on this very subject. Additionally, set backs are taken from the center of the monopole and NOT the tip of the blade parallel to the ground as is the case under the Building Code!! NYS should be concerned with Safety First for all circumstances.

Certification of turbines, project commissioning and monitoring should be an absolute requirement. Without the different levels of Certification, NYS will be open to liability.

A certification Overview can be found at:
Click here: Certification and Testing of Wind Turbines

Certification and Testing of Wind Turbines
http://www.wwindea.org/technology/ch01/en/1_5.html

"The certification and testing of wind turbines is very important to provide assurance to all entities involved in wind energy projects: wind park operators, banks, government agencies, etc. People usually comprehend certification as the examination of companies, operators or products according to certain criteria. In the Wind Energy sector certification of products and manufacturers is a standard. The certification (of conformity) is a task done by independent institutions (or persons), which document that a result, procedure or service is in accordance with a certain standard or another certain normative document.

The most important part of the wind turbine type certification is the design assessment, which generally is executed in two steps. The first step comprehends the testing of the operation and security concepts and also the design load and load calculations. The second step of the design evaluation conformity compares the results of the first step with the relevant guidelines and standards.

The type testing objective is to provide data needed to verify aspects which are vital to safety and therefore need additional experimental verification, and aspects which cannot be reliably evaluated by analysis. The type testing comprises safety & function tests, dynamic behaviour tests, load measurements, blade tests and other component tests.

The objective of the manufacturing evaluation is to assess if the specific manufactured wind turbine is in conformity with the design specifications. This evaluation shall include an examination of the quality system, an assessment of the implementation with regard to the design documentation and surveillance and auditing. These elements together shall assure that the technical requirements identified in the design documentation are correctly implemented in the manufacturing procedures, that all quality checkpoints with the process of manufacture identified in the design process are included and that the surveillance or auditing is sufficient to assure that conformity is maintained in the ongoing manufacturing process.

In the characteristic measurements performance related characteristics of the wind turbine type is established. The type characteristics
measurements comprise power performance tests, power quality tests and acoustic noise measurements. The foundations of the certification are the above mentioned standards and normative documents. Here should be distinguished wind energy specific norms and general norms, which may also be applied to wind turbines. Besides a certification of the product and the manufacturer there is sometimes an additional project specific test, especially when the local conditions are not covered by the general certification scheme."
A highly detailed review of the different types of wind project certification can be found at:
Click here: GL Renewables Certification Guidelines - GL Renewables Certification
Besides Certification of Turbine and Project, the certification process can include monitoring, NOISE, Shadow Flicker and other Public Health and Safety Issues as well as GRID Code Compliance and as in our case, how close to a gas line is too close especially with huge trucks constantly riding over or near it? Thanks to the DPS for continuing the collaborative process for the Article 10 requirements.
Respectfully,
Dr. Alice Sokolow
Residing in Penfield and Prattsburgh, NY