

200 Trillium Lane Albany, NY 12203 Tel: 518-869-9731 Fax: 518-869-0737 nasnys@audubon.org http://ny.audubon.org

BOARD OF DIRECTORS

Constantine Sidamon-Eristoff *Chairman* Oakes Ames

Vice Chair Alexander Zagoreos

Treasurer Margot Paul Ernst

Secretary Rick Lazio

Marian Heiskell *Stewardship Chairs* Polly Bruckmann

Robert Dryfoos Gladys Goldmann Anne Manice David Manning Iames Melius Edward Mohlenhoff Robert Moses Gerhard J. Neumaier Ross Pepe Sarah Jeffords Radcliffe Norman Shapiro Peggy Shepard Virginia K. Stowe Richard Trepp Ross Whaley John Wilkinson

Albert E. Caccese Executive Director October 19, 2009

SEP Comments NYSERDA 17 Columbia Circle Albany, NY 12203-6399

To Whom It May Concern:

On behalf of Audubon New York, the state program of the National Audubon Society representing 50,000 members and 27 local chapters, I thank you for the opportunity to comment on the Draft 2009 State Energy Plan (SEP or Plan). The generation, conservation, and use of energy are critically linked in several ways to Audubon's mission to protect birds, other wildlife, and their habitats. Audubon New York commends the work of the Energy Planning Board for developing this Draft Plan, and we hope that our comments below can help strengthen the document and ensure the plan balances the state's needs to develop a clean energy economy and reliably meet future energy demands with the need to protect the state's natural resources which support a burgeoning multi-billion dollar eco-tourism industry.

General Comments.

Overall, Audubon New York is concerned that the Plan does not adequately define the environmental risks associated with energy development and transmission in the state, and does not discuss the need to mitigate against any of the potential impacts to the state's natural resources. As the impacts of energy generation and transmission infrastructure on wildlife and habitats may be relatively direct (e.g., mortality from collisions, habitat fragmentation, water quality impairments) or more indirect (e.g., acid rain and mercury deposition), it is imperative that any energy plan developed by the State include specific discussions on the need to limit these impacts to the state's biodiversity and ecosystems.

It is unfortunate to note that there is no discussion in the draft plan of the habitat loss and fragmentation that will undoubtedly occur through increased production of renewable energy, drilling for natural gas, and the associated transmission infrastructure needed to deliver the gas and electricity to end users, and no discussion of the need to assess the cumulative impacts of energy generation and transmission infrastructure on a regional and statewide basis. As habitat loss is the leading threat to bird species in the state, the decisions the State makes regarding siting of energy generation and transmission infrastructure will have profound and long-lasting impacts on the remaining wildlife habitat.

Therefore, it is imperative that the State Energy Plan:

1) Provide for a comprehensive and centralized statewide siting process, such as through renewing Article X, which would require appropriate environmental reviews prior to construction to determine and mitigate for impacts to natural resources of individual projects and cumulative impacts of surrounding projects as well.

- 1) Call for mapping of the state's high priority and rare ecosystems, habitats and other vulnerable natural resources to determine where and where not to site energy generation and transmission infrastructure in order to avoid areas of high concern, reduce impacts to Species of Greatest Conservation Need (see New York's State Wildlife Action Plan), and provide a framework for targeted mitigation to compensate for impacts to these high priority natural resources.
- 2) Discuss the role that healthy, unfragmented forests and sustainable forestry play in carbon sequestration and production of cleaner-burning bio-fuels.
- 3) Discuss the need for sustainably produced bio-fuels.

Comprehensive Statewide Siting process focused on protecting natural resources

In order to fully assess the impacts of energy production, including renewable energy, Audubon New York fully believes that state agencies, such as the Department of Environmental Conservation (DEC) and the Public Service Commission (PSC), must have oversight of the development of energy, including renewable energy facilities, and transmission in New York State. All sources of energy, including renewable energy and drilling for natural gas, and associated transmission infrastructure must go through the appropriate and comprehensive environmental reviews and cumulative impact assessments to ensure the state's natural resources are protected. While we appreciate the attention in the plan to the need for a statewide siting process, Audubon New York is concerned that the Draft Plan ignores the need for this siting process to protect natural resources.

Without a new statewide siting process, such as through a reinstated Article X process, local towns have been left in control of siting energy facilities. As stated in the plan, this has led to a patchwork of local regulations, and in Audubon's view resulted in inappropriately sited facilities, failure to maximize efficient transfer of energy to users, and no analysis of cumulative impacts. Also as noted in the plan in the discussion of enforcing the energy code (pg.16), many municipalities are "severely understaffed" and lack the expertise to accurately assess the impacts of energy production on natural resources and adequately review projects.

Therefore, in order to ensure that energy planning is coordinated in a manner that is most protective of the state's natural resources and most efficient, it is imperative that the State have oversight and regulatory authority over energy development through a comprehensive statewide siting process. Through this process, Audubon New York specifically calls for the DEC's office of Natural Resources, the Division of Fish, Wildlife and Marine Resources, and office of Invasive Species, to be consulted, as these wildlife and plant biologists would add an important perspective regarding the impacts that siting energy facilities, transmission infrastructure, and alternative fuel choices may have on Species of Greatest Conservation Need and their habitats, providing necessary protection of the state's natural resources as New York pursues its sustainable energy future.

To ensure that the Plan adequately encompasses this need to protect the state's biodiversity and natural resources, Audubon New York recommends the following changes to the recommendation on Page 55:

• The State supports enacting a power plant siting law that provides greater market certainty to developers and investors, enhances public participation with sufficient intervenor funding made available to local communities, includes improved notice provisions, and addresses environmental justice issues, and protects biodiversity and natural resources.

For additional information on the need for a strong comprehensive statewide siting approach, we have enclosed our Conservation Policy Resolution on "Promoting Responsibly Sited Wind Power and BioFuel Developments in New York State", which was developed by Audubon New York and the Audubon Council of New York State, and our Wind Power Position Statement which provides further detail regarding specific siting requirements for wind power production.

Mapping Priority Habitats, Transmission Corridors and Energy Production Zones.

In other states, Audubon has participated in collaborative energy development planning and siting exercises with industry, government agencies, and other non-governmental organizations; a prime example is the efforts of the Western Governors Association to map Western Renewable Energy Zones (see Western Renewable Energy Zones – Phase 1 Report: Mapping concentrated, high quality resources to meet demand in the Western Interconnection's distant markets, June 2009, Western Governor's Association¹). This lengthy, multi-state process enabled the western states to identify and map areas where renewable energy development makes the most sense in terms of where the best resources are (e.g., wind resources), efficiently moving the energy to consumers, and minimizing negative impacts to natural resources and priority ecosystems. Identification of transmission corridors to facilitate development of an energy grid for the 21st Century are included in this planning process.

Audubon strongly urges New York State to engage in a similar process for the Eastern Interconnection area. The U.S. Department of Energy currently has funding available to promote planning for a modern energy grid in the Eastern Interconnect. Indications are that the DOE intends this process to follow that used in the western region, which explicitly considered impacts to sensitive ecosystems and wildlife habitat and provides a better way of planning for cumulative impacts. Audubon New York urges for a recommendation to be added to the recommendations on page 59 to direct the state to initiate a similar comprehensive renewable energy production zone and transmission planning process.

While we appreciate the few references in the Draft State Energy Plan to utilizing existing rights-of-way for new transmission projects (pg 60), we are concerned that this expansion will significantly and negatively impact natural resources due to lack of appropriate siting and careful, centralized planning. We are also concerned with the recommendation to site electricity transmission and distribution infrastructure on State-owned lands (pg 60), as without careful planning this could potentially impact priority habitats and Species of Greatest Conservation Need on these State-owned lands. To address this concern, Audubon New York recommends the following changes to this recommendation:

• The State should encourage cooperation in the development of electricity transmission and distribution infrastructure, including smart grid technologies, using State-owned lands and rights-of-way unless such development would require a Constitutional Amendment, or be inconsistent with the public trust or parkland doctrines, *or adversely impact natural resources found on the protected State lands*.

Forest Protection

In New York, forests store huge amounts of carbon and have potential to sequester additional carbon provided that policies promote reforestation, forest protection, and management of forests on longer rotations to increase their average amount of wood biomass over time. In addition, forests may offer bio-fuel alternatives to fossil fuels that make sense as ways to reduce atmospheric carbon dioxide. Furthermore, as New York's most widespread and important wildlife habitat, healthy forests are critical for the adaptation of wildlife to climate change. Many experts are calling for reducing forest fragmentation, i.e. increasing connectivity of existing forests by protecting and restoring connective corridors, to facilitate the movement of ecosystems with changing climate. Because of these three important an interrelated roles of forests, the protection of New York's forest should be addressed explicitly in the Draft State Energy Plan, especially with regard to the recommendations to create a Climate Action Plan on pages 52-53.

More to the point, the development of renewable energy production such as wind power and the creation of energy transmission corridors should avoid clearing or fragmenting of forests as much as possible. Any clearing or fragmenting of forests resulting from energy development should be offset through mitigation that increases the overall connectivity and amount of forests. Which is why Audubon New York calls for the

¹ http://www.westgov.org/wga/publicat/WREZ09.pdf

creation of a mitigation fund, paid for by energy developers, to offset the negative environmental consequences of expanded energy development and transmission infrastructure, and provide for proper long-term monitoring of sited facilities.

Responsibly-sited and Produced Bio-fuels: In assessing the costs and benefits of promoting bio-fuels, specific attention should be paid to the impacts of bio-fuel production on wildlife species and habitats, as well as on the net impact of such bio-fuels on atmospheric carbon dioxide concentrations and emissions. Grassland birds, such as Bobolinks, Short-eared Owls, Eastern Meadowlarks, and other species that depend on habitat such as hayfields and pastures, are a group of species in serious decline in New York State. Their populations are threatened in some areas where agricultural practices have intensified, resulting in hayfields and pastures that do not allow grassland birds to breed successfully, and in other areas where habitat is being converted to production of bio-fuels such as corn ethanol that do not provide suitable breeding habitat. As the State seeks to increase development of bio-fuels, we must ensure that these energy choices are truly sustainable for all sectors of the environment and economy and that they make sense as far as their contributions to fighting climate change and reducing atmospheric carbon dioxide.

Other Recommendations.

Smart growth and mass transit expansion – Audubon New York commends the Plan's focus on the need for Smart Growth and improved availability of mass transit options, however more discussion is needed and specific strategies must be defined.

Energy Efficiency – We also support the many references to improving energy efficiency and reducing energy use, and stand ready to help the state advance 15x15. The cleanest and most socially and environmentally responsible energy source is the energy that is never used.

Offshore Wind Development (Pg 46) – Comprehensive avian assessments must be conducted prior to moving forward with this development, and assessments of the impacts to coastal and aquatic ecosystems must take place as well and the plan should explicitly call for these to occur.

Siting Energy Production on State Lands (pg 48) – Audubon New York strongly believes this section needs further clarification. While it seems that this recommendation is focused on energy production on state facilities, the language could be interpreted as opening important habitats and open spaces to energy production which could have grave consequences to habitat and biodiversity conservation. While Audubon New York believes the public trust and parkland doctrines provide for the protection of natural resources on state lands, specific recommendations must be made in this section clarifying that the intent of the state to protect the biodiversity and habitats on state lands. Specific references must also be included regarding how the state will mitigate for the impacts of energy development on state lands.

Drilling for Natural Gas in the Marcellus Shale Field (pgs 50-51) – The primary concerns for Audubon New York and our chapters with expanded hydraulic fracturing gas exploration and production in New York State are potential ground and surface water contamination; storage, treatment, and disposal of production fluids; and impacts to bird and wildlife habitat especially from the cumulative impact of a full well development scenario. However, none of these significant issues are discussed in the Plan, and should be. Not only should minimizing fragmentation and destruction of important habitats be addressed, mitigation for unavoidable impacts should also be addressed.

Alternative Energy and Wastewater Treatment Plants- In addition to the discussion of turning farm waste into energy (pg. 39), a similar discussion of the energy generation potential of Wastewater Treatement Plants (WWTPs) must also be contained in the plan. A 2007 NYSERDA study² determined a potential for

² "ANAEROBIC DIGESTER GAS-TOELECTRICITY FOR THE MUNICIPAL WASTEWATER SECTOR IN NEW YORK" http://www.nyserda.org/programs/Environment/MC08-02%20Anaerobic%20Digester%20GTE%20Wastewater.pdf

generating up to 24 MW of electricity through digesters at WWTPs in NY, and this study and information should be incorportated into the plan.

State Government Buildings (Page 20): While we support the focus on improving energy efficiency in state buildings, **this specific section of the Plan could be greatly enhanced to protect migrating birds while reducing the state's energy use through the addition of a specific recommendation to establish a "Lights Out New York" program for all State-owned buildings.**

New York City Audubon, a local Audubon Chapter, has been successful in enacting a "Lights Out NY" campaign with the City of New York. Through this program, the City and Audubon are promoting education and outreach by encouraging owners of tall buildings to turn off lights during migration season to help save night-migrating birds while reducing energy costs. Lights Out NY requests that tenants in these buildings turn off lights in unused offices, and/ or pull the shades down in active offices to eliminate potential avian confusion.

By creating a "Lights Out New York" program, the State would reduce the unnecessary lighting of the night sky, thus decreasing the threats posed to the migrating birds and wildlife of New York, all while reducing energy use by the state through using more efficient products. It would also, promote the use of energy efficient lighting products, and ones that reduce light cast into the nighttime sky, decreasing the demand for electricity, which will reduce air pollution produced in energy generation, and decrease costs to. In addition, the state would be leading by example and encouraging other municipalities to enact similar initiatives to protect birds while simultaneously reducing energy consumption.

Thank you again for the opportunity to comment on the Draft 2009 State Energy Plan. Audubon New York looks forward to working with the State to realize the successful implementation of a balanced State Energy Plan that is protective of the State's biodiversity and important habitats while growing the state's clean energy future. Should you have any questions regarding our comments, or need any additional information, please contact me at 518-869-9731 or smahar@audubon.org.

Sincerely,

Sean Mahar Director of Government Relations and Communications Audubon New York

PROMOTING RESPONSIBLY SITED WIND POWER AND BIOFUEL DEVELOPMENTS IN NEW YORK STATE

- **WHEREAS**, energy from nonrenewable sources, such as fossil fuels, is associated with several major negative environmental impacts, including habitat damage from mining and drilling, oil spills, pollution, acid rain, and global climate change, among others; and
- WHEREAS, Audubon New York supports the development of renewable sources of energy, including power-producing wind turbines that are properly sited, and Biofuels, because they have the potential to reduce the negative environmental impacts of fossil fuels, including carbon dioxide emissions; and
- WHEREAS, wind power sites can contain as many as several hundred wind turbines, each up to 450-feet tall, and the development of power producing wind turbines (wind turbine developments) is increasing across the state; and
- WHEREAS, even though wind power, is a clean, renewable source of energy with few negative environmental impacts, these facilities have the potential to negatively affect birds, bats and other wildlife through direct mortality from collisions, through habitat degradation from turbine and transmission line construction and maintenance, and through behavioral changes that cause increased energy expenditures; and
- **WHEREAS**, these impacts of wind turbines and other sources of energy can be mitigated through proper site assessments prior to construction of facilities, by avoiding the placement of wind energy developments in high risk areas; and
- **WHEREAS**, evaluation of risks associated with a proposed wind power development requires thorough evaluation of avian mortality and other impacts at existing and new facilities; and
- **WHEREAS**, the United States Fish and Wildlife Service has produced a set of guidelines for the siting, lighting, and construction of communication towers and wind turbines to mitigate bird kills; and
- WHEREAS, the New York State Department of Environmental Conservation has developed guidelines for studying potential and realized bird and bat mortality at wind power facilities in New York State, including site assessment and post-construction studies of impacts; and
- WHEREAS, Grassland birds, such as Bobolinks, Short-eared Owls, Eastern Meadowlarks and other species that depend on habitat such as hayfields and pastures, are a group of species in serious decline in New York State, and may be disproportionally impacted by development of Biofuels and wind energy; and
- **WHEREAS,** Their populations are threatened in some areas where agricultural practices have intensified resulting in hayfields and pastures that do not allow grassland birds to breed

successfully, and in other areas where habitat is being converted to production of biofuel crops that do not provide suitable breeding habitat; and

- **WHEREAS,** As the State seeks to increase development of biofuels, specific attention must be paid to the impacts of the production of biofuel crops on wildlife species and habitats; and
- **WEHREAS,** in absence of reforming Article X, the section of law governing power plant siting which sunset in 2003, in 2008, through executive order, Governor Paterson created the State Energy Planning Board and tasked them with developing a state energy plan; and
- **WHEREAS,** without a new Article X, local Towns have been left in control over siting energy facilities, and this has lead to inappropriately sited facilities and no analysis of cumulative impacts of individual town decisions and those of surrounding towns; and
- **WHEREAS**, in order to fully assess the impacts of renewable energy production, State Agencies, such as the DEC and Public Service Commission, must have oversight over the development of energy, including renewable energy facilities, in New York State.

THEREFORE, BE IT

- **RESOLVED**, that in an attempt to limit negative impacts to the environment, in particular to birds, Audubon New York calls for a comprehensive, consistent approach in performing avian assessments at proposed wind turbine development sites that follows the guidelines released in early 2009 by the DEC; and be it further
- **RESOLVED,** that Audubon New York urges the state to make observance of the DECs guidelines for bird and bat studies mandatory through the state energy planning process or through legislation; and be it further
- **RESOLVED**, that Audubon New York opposes wind power development on sites determined to be of high risk to bird populations, including: 1) bird migration pathways or in areas where birds are highly concentrated during migration; 2) sites in habitats important to state and federally listed bird species; 3) Important Bird Areas (IBAs) and Bird Conservation Areas (BCAs) identified for their importance to large numbers of migrants, either raptors or nocturnal migrants; and 4) IBAs and BCAs where construction of the turbines (i.e., the footprint) would significantly lower the habitat value of the site; and be it further
- **RESOLVED**, that Audubon New York encourages wind power companies to cooperate with and support studies to further document the impacts of their industries on birds and to follow the United States Fish and Wildlife Service and DEC guidelines in their construction; and be it further
- **RESOLVED,** that all sources of energy, including renewable energy, go through the appropriate and comprehensive environmental reviews, and cumulative impact assessments, and that

in the development of new energy transmission infrastructure, the protection of IBAs, BCAs, wetlands and unfragmented habitat be a priority; and be it further

- **RESVOLED,** that representatives of the DEC's office of Natural Resources, the Division of Fish, Wildlife and Marine Resources, and office of Invasive Species, must be consulted in the development of the State Energy Plan, as these wildlife and plant biologists would add an important perspective regarding the impacts that siting energy facilities and alternative fuel choices may have on species of conservation concern and their habitats, providing necessary protection of the State's natural resources as New York pursues its sustainable energy future; and be it further
- **RESOLVED,** that Audubon New York calls for the State's energy plan to assess how alternative energy sources offset our need for fossil fuels and in fact reduces Carbon Dioxide emissions; and be it further
- **RESOLVED**, that Audubon New York calls for coordinated state oversight and regulatory authority to implement development of alternative energy in New York State that includes DEC input on, and approval of, impacts to birds, bats, other wildlife and their habitats.

Moved and Seconded by Respectively,

All 27 Chapters of the Audubon Council of New York State.



Position on Wind Power Development June 2004

Audubon New York supports the development of renewable sources of energy, including wind power. Energy from nonrenewable sources, such as fossil fuels, is associated with several major negative environmental impacts, including habitat damage from mining and drilling, oil spills, pollution, acid rain, and global climate change, among others. To the extent that use of wind power reduces fossil fuel use, these negative environmental impacts that harm birds and other wildlife may be reduced.

Wind power is a clean, renewable source of energy with few negative environmental impacts. However, wind power facilities have the potential to negatively affect birds and other wildlife through direct mortality from collisions and through habitat degradation from turbine construction and maintenance. Audubon New York supports efforts to minimize potential negative impacts of wind power through proper site assessments prior to construction of wind turbines, avoiding the placement of wind energy developments in high risk areas, and through thorough evaluation of avian mortality at existing and new wind turbine facilities.

Audubon New York calls for comprehensive avian surveys at proposed wind turbine sites prior to site development. Assessing avian use of a site prior to wind turbine development is a crucial first step in preventing wind farm placement in high-risk areas. Pre-development surveys should include both field and radar surveys during the breeding, migrating, and wintering seasons, should allow for adequate observation sample sizes (i.e., sampling days), and ideally would occur for more than one year.

Audubon New York opposes wind farm development on sites determined to be of high risk to bird populations, including: 1) sites of known local bird migration pathways or in areas where birds are highly concentrated during migration; 2) sites in habitats known to be important to state and federally listed bird species; 3) Important Bird Areas (IBAs) and Bird Conservation Areas (BCAs) identified for their importance to large numbers of migrants, either raptors or nocturnal migrants; and 4) IBAs and BCAs where construction of the turbines (i.e., the footprint) would significantly lower the habitat value of the site.

To learn more about how and in what circumstances wind turbines significantly increase bird mortality and potentially impact bird populations, Audubon New York calls for additional, thorough studies to be conducted on the impacts of wind energy projects on birds at existing wind sites and for three to five years following the construction of new sites. These studies should be paid for out of a fund established by wind energy producers.

Finally, Audubon New York encourages the United States Fish and Wildlife Service (USFWS) and New York State Department of Environmental Conservation to continue refining the USFWS interim guidelines for the siting, design, construction, and lighting of wind towers to mitigate potential negative impacts to birds, other wildlife, and their habitats.