

October 19, 2009

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

Dear Sir or Madam:

Thank you for the opportunity to comment on the Draft 2009 New York State Energy Plan (the Plan). The Nature Conservancy greatly appreciates the time and resources that the Energy Planning Board has dedicated to developing the Plan. We believe that the energy planning effort can and must be used to identify, avoid, minimize and mitigate environmental impacts and protect natural resources. Our comments below are intended to help strengthen and improve the Plan for the benefit of nature and people. This approach is consistent with our mission, which is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

Comment Summary

The Nature Conservancy in New York finds that overall the Plan lacks a discussion of environmental impacts beyond the issues of environmental justice and climate change. While these are important issues, **the Plan must discuss the state's need for a framework for energy siting that protects critical natural resources, and minimizes and mitigates impacts where they occur.**

- **Energy siting should be conducted through an thoughtful and thorough process that considers individual projects' impacts to wildlife habitats and natural resources , as well as the cumulative impacts of energy siting throughout the region and/or the state.** Creating a statewide siting process for energy transmission and generation – including wind and solar facilities – will ensure cumulative impacts are considered, and social, environmental, and economic concerns that may have impacts beyond municipal borders are balanced.
- **The Plan should include a call for mapping New York's critical wildlife habitats and natural resources,** so that areas of high importance are avoided, and projects in those areas that can't be avoided are mitigated. The Conservancy has an extensive set of mapping resources that we are willing to share and contribute to this effort.
- **A mitigation fund should be created in New York State,** with funding from energy developers to offset resource and environmental impacts, including lost or negatively

affected wildlife habitat as a result of energy development, production and transmission, as well as to provide funding for monitoring and evaluation to measure the effectiveness, efficiency and efficacy of energy mitigation efforts.

- **Caution should be used regarding the siting of energy facilities on state lands.** Terms used in the Plan such as “inconsistent with the public trust or parkland doctrines” should be explained to ensure the public is fully aware of the implications of the recommendation.
- **The Plan should include a stronger focus on smart growth,** as land use patterns can help determine where and how energy facilities and transmission are developed.
- **Energy conservation and efficiency must be part of New York’s energy planning “mix.”** The Nature Conservancy supports the inclusion of a strategy to “produce, deliver and use all forms of energy more efficiently in the electricity, transportation and buildings sectors.” By reducing the need for new facilities, environmental impacts can be avoided.
- **The Plan should include ways of evaluating the impacts of energy produced outside the state from multiple sources on New York’s and the region’s natural resources and wildlife habitats. For example, we propose advancing the concept of “critical loads” for air pollutants produced by fossil fuel combustion inside and outside of New York.** Critical loads are defined as the levels of pollutant deposition that can be tolerated by sensitive ecosystems without incurring significant harm.

Background on The Nature Conservancy’s Work on Energy Development

The Nature Conservancy is working nationwide and around the world with industry and governments to plan for energy siting, prevent impacts to wildlife habitats and natural resources wherever possible, and to create mitigation policies that address ecological impacts where and when necessary. The Conservancy’s “Energy By Design” program has been deployed in areas like the Jonah Field in Wyoming, where one of the nation’s last remaining large, intact sagebrush ecosystems, and the species that depend on it, was threatened by the development for 8 trillion cubic feet of natural gas. The Conservancy’s collaboration helped create a mitigation fund that ensures an equivalent amount of wildlife habitat will be protected in perpetuity as is affected by the project through off-site conservation.¹

In Kansas’ Flint Hills, tallgrass prairie habitat is threatened by wind development, an important source of renewable energy. The Nature Conservancy is working with wind developers and state government to synthesize existing map data on wildlife, wind and environmental resources into a publicly accessible database that can assist developers in siting projects in areas that will reduce impacts to important species and habitats.²

¹ Kiesecker, J.M., et al. 2009. A Framework for Implementing Biodiversity Offsets: Selecting Sites and Determining Scale. *BioScience* vol 59 (1): 77-84. Rebecca Huntington: “Proving Ground: Can the Western Energy Boom be Anything but a Bust for Wildlife?” *Nature Conservancy Magazine*, Winter 2008.

<http://www.nature.org/magazine/winter2008/features/art26450.html>. Accessed 9/29/09.

² Madeline Bodin: “An Ill Wind? Wind Power Might Slow Climate Change – But Will All Those Windmills Hurt Nature?” *Nature Conservancy Magazine*, Autumn 2009.

<http://www.nature.org/magazine/autumn2009/features/index.html>. Accessed 9/29/09.

In both cases, the Conservancy is using science to assist communities, government and developers in creating maps that include the overlapping interests – priority habitats and priority energy development sites – and use those data to direct development into areas that avoid and/or minimize impacts and plan for mitigation where impacts occur. While offsite mitigation (as in the case of the Jonah Field) is not ideal, it has shown that the Conservancy’s science based approach can lead to conservation outcomes that benefit all involved in the project and can be used to create more proactive avoidance or mitigation plans. For this reason, the Conservancy is working with companies and governments in many regions of the United States, and internationally, to address impacts from energy development.

Given the expectation of national policy requiring the use of renewable energy to meet a larger portion of the nation’s demand, and limitations on greenhouse gas emissions, The Nature Conservancy’s scientists calculate that “the footprint of new energy development including wind, solar and biofuels could occupy nearly 80,000 miles of land by 2030 – an area larger than the state of Minnesota.”³ As the state works to meet demand for energy and reduce climate change impacts, it is critical that natural resources be protected. The Nature Conservancy in New York is hopeful that our “Energy By Design” framework can be deployed in New York in cooperation with the State, conservation partners, industry, and other stakeholders to realize the benefits of proactive energy planning locally and regionally.

Work is needed to develop comprehensive mapping that can be used to plan for energy development, and create a framework for siting energy facilities and transmission infrastructure without damaging critical ecosystems. This mapping work is needed urgently, as energy and transmission siting is moving forward, and data on natural resources must be considered in order to protect key habitats and species before it is too late. The Conservancy would welcome the opportunity to share with you our Energy By Design framework and its application in Wyoming, Kansas, Colorado and around the world.

The Draft 2009 State Energy Plan – General Comments

The Nature Conservancy in New York supports several of the broad concepts in the Plan, including recognition of the relationship between energy planning and climate change, and the importance of the transition to an energy system with low greenhouse gas emissions that can also meet the state’s energy needs, and the emphasis on producing, delivering and using energy more efficiently.

The Conservancy believes that the Plan should include more emphasis on the protection of wildlife habitats and natural resources. For example, policy objectives should address environmental risks beyond carbon measurement, and include the need to protect water resources (both freshwater and marine), forests, and wildlife as energy and transmission facilities are sited. Additionally, the Plan should include greater emphasis on smart growth and “Climate Smart” communities which can protect habitat and natural processes that make communities more resilient to climate change. Most of the references to environmental risk include public health, environmental justice or climate change concerns. While these are important issues, increased

³ Ibid. And see McDonald, R. I., et al. 2009. Energy Sprawl or Energy Efficiency: Climate Policy Impacts on Natural Habitat for the United States of America. PLoS ONE Vol. 4(8):e6802.

emphasis on protecting natural resources is needed in the Plan. Assessments on air pollution impacts are needed, and The Nature Conservancy believes that the state should implement critical loads to better understand the impacts of air pollution on our major ecosystem types. The concept of critical loads, and the commitment of the state to adopt this approach, should be included in the Plan.

Furthermore, additional assessments are needed to determine the impacts of energy production and transmission on forest and aquatic ecosystems and identify threats that may exist including habitat fragmentation, water pollution, instream flow alteration, invasive species proliferation and other impacts. Cost-benefit analysis that quantifies the value of natural habitats and open space should be developed. Siting of energy facilities is a major issue for natural resources protection. The state can use this information, as well as existing habitat, wildlife and energy potential data to determine where appropriate sites exist for energy siting, and what types of mitigation will be needed for various energy projects. The development of an ecosystem framework for making decisions can avoid severe environmental damage and can result in the much more effective expenditure of compensatory funds for mitigation.

The Nature Conservancy believes that the state must engage in a comprehensive process to determine where various energy and transmission siting should and should not occur. Siting protocols are needed to ensure that the natural integrity and character of lands with potential for energy development are protected. Furthermore, the Plan states that, “the siting process for wind as well as other generation, is left to a patchwork of local and state regulatory processes.”⁴ The Nature Conservancy believes that this patchwork creates difficulties in realizing conservation outcomes on energy projects, and that a statewide framework for energy siting is needed in New York. However, the Plan also makes reference to a statewide siting program that would include “authorization to override the application of unreasonably restrictive laws.”⁵ The Plan does not, however, define what the state would consider “unreasonably restrictive.” The Nature Conservancy would support the ability of municipalities to continue to enforce laws that are more stringent than state law in order to protect natural resources.

The Plan seems to ignore the need for a statewide siting program that addresses impacts to natural resources caused by the development of renewable and fossil fuel resources. The recommendation that “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”⁶ should be expanded to include the phrase, “and cumulative impacts to migratory species, wildlife habitats and natural resources” after the words, “environmental justice issues.” In the most recent state energy siting law, Article X which is now expired, the Siting Board was required to issue a decision on projects within one year of a completed application being filed, and exceptions were limited.⁷ Should the state move forward with the authorization of a new, statewide energy siting policy, The Nature Conservancy suggests work be done to ensure that there is adequate time for site-specific and cumulative

⁴ Draft 2009 State Energy Plan. p. 54-55.

⁵ p. 55

⁶ Ibid

⁷ Siting New Energy Infrastructure, New York State Energy Plan 2009, August 2009, p.15.

impact studies and analysis to take place. This may necessitate extending the time the state entity charged with project approval has to approve or deny projects, or require developers to conduct such studies and submit them with their application for consideration by the approving entity.

Finally, a mitigation fund should be created in New York State, with funding from energy developers to offset environmental impacts associated with energy development, production and transmission, including lost or damaged wildlife habitat, as well as to provide funding for monitoring and evaluation to measure the efficacy of energy strategies.

Chapter 3: Strategy 2: Support the Development of In-State Energy Supplies

“Accelerating the strategic development of New York’s energy resources, both in the renewable energy and natural gas areas, will play a key role in achieving the Plan’s policy objectives... To the extent that renewable resources and natural gas are able to displace the use of higher emitting fossil fuels, relying more heavily on these in-state resources will also reduce public health and environmental risks posed by all sectors that produce and use energy.”⁸ While The Nature Conservancy support and applauds the state’s efforts to transition to a lower carbon energy production and reduce greenhouse gas emissions, siting of renewable energy and gas facilities remain a significant issue in terms of the significant wildlife habitat and natural resource impacts at specific locations, as well as cumulative impacts. The Plan must not consider them a “panacea” and must take these impacts into account. Discussion of these impacts is absent from the Draft Plan, and The Nature Conservancy believes these impacts should be discussed and assessed in the Final Plan.

The Plan states, “When compared with carbon-intensive fossil fuel resources, renewable resources generally have significantly lower negative impacts on public health and the environment, and contribute less to climate change.”⁹ The Conservancy appreciates the note included with this statement, indicating that the combustion of biomass and biofuels may lead to environmental impacts and health risks, which are being studied. However, this is another example of the absence of the evaluation of the negative impacts on natural resources that can be associated with renewable energies. For example, woody biomass that is harvested unsustainably can create substantial negative impacts to the environmental and long-term economic health of the forest. There is a need for procurement requirements that include verification of sustainably produced biomass if this technology is to be deployed throughout the state. This impact is not caused by the combustion of the biomass, and will not result in a public health impact, but the affects on our forest ecosystems could impair critical habitats as well as the state’s forest industry. Natural resources issues including these for biomass, as well as impacts caused by other renewable and non-renewable energy production should be included in the Plan.

Encouraging the growth of energy crops by in-state farmers¹⁰ is an enviable goal, however there is no discussion about the potential for land-use changes growing out of the potential changes in

⁸ Draft 2009 State Energy Plan, p. 36.

⁹ p. 36

¹⁰ p. 39

crop choice by New York farmers. A change in the use of arable land from food production to fuel production for biomass could result in increased pressure to convert non-farm land to farm land or to increased intensity of growth on the newly diminished acreage for food production. In either case, there are significant potential impacts to the natural resources from such changes, including but not limited to: deforestation, degraded water quality from increased run-off area (deforestation) or increased contaminant run-off (higher concentrations of fertilizers and pesticides), impacts on climate change (from deforestation), habitat destruction, and others. A carefully thought out strategy should be pursued to achieve both increased local production of biomass fuel as well as limited impacts from land-use changes.

The Nature Conservancy supports distributed generation, including a Customer-Sited Tier in the Renewable Portfolio Standard, which can help reduce the need for large distribution networks and permits small scale energy generation at sites that are already developed. Curtailing the need to expand electric generation and distribution networks will be beneficial to natural resources. In addition, the state tax credits referenced on page 44 of the Plan should be maintained or expanded to allow for greater use of site based clean energy technologies.

Due to transmission issues and high energy demand in specific regions, the Plan seems to indicate a shift towards siting wind facilities to off-shore areas, to serve the Long Island and New York City regions.¹¹ The state should study the potential coastal and aquatic habitat impacts of off-shore energy siting as an initial step in the process in evaluating off-shore development, to identify siting constraints and the potential for cumulative impacts of turbine and transmission siting. Tidal, current and other hydrokinetic resources should be subject to the same type of evaluation.

The Plan recommends that the state:

Assess the potential for siting renewable energy projects, including wind, solar, geothermal, hydrokinetic and hydropower on those State-owned lands and waterways where such development would not require a constitutional amendment or be inconsistent with the public trust or parkland doctrines. This will be accomplished by developing a process for installing renewable energy technologies on State facilities, particularly those that are energy intensive, and have open space and/or compatible roofing.¹²

While this recommendation may be intended primarily to address state facilities and buildings, it could open a difficult set of issues regarding public trust issues on public lands and underwater lands. Furthermore, language must be included stating that no environmental impacts, including potential losses of wildlife habitat and biodiversity, will occur if renewable energy is developed on state lands. Terms such as “inconsistent with the public trust or parkland doctrines” should be explained to ensure the public is fully aware of the implications of the recommendation. Expanding detail on this issue may prevent inappropriate interpretations of the meaning in the future. Furthermore, specific allowable actions should be stated to avoid uncertainty. (For example, rooftop solar P.V. units) Larger energy developments on state owned lands should either be avoided or a “mitigation hierarchy” should be employed so that impacts are first and foremost avoided, minimized, and if they occur, mitigated with funding.

¹¹ p. 46

¹² p. 48

The Plan encourages the development of the Marcellus Shale natural gas formation and the recommendations included focus entirely on supporting private interest and investment. The Plan lists the economic benefits to land owners and the state saying, “Development of State-owned lands could provide much needed revenue relief to the State and spur economic development and job creation in economically depressed regions of the State.”¹³ However, the Plan does not address the issue of potential environmental degradation caused by widespread exploration for natural gas in the Marcellus Shale in New York, and only makes small mention of the Supplemental Environmental Impact Statement being developed by the Department of Environmental Conservation. There should be more detailed discussion of the environmental trade-offs this strategy represents including but not limited to water quality degradation, large scale water withdrawals and the impact on instream flows, and habitat and forest fragmentation. There are potentially significant impacts to natural resources, as well as potential impacts to regional economies and public health as both rely on healthy natural resources for ecosystem services including clean drinking water, fishing, swimming, tourism and forestry. Finally, the Plan recommends that the state “Study the potential for new private investment in extracting natural gas in the Marcellus Shale on State-owned lands where it would not be inconsistent with public trust or parkland doctrines, in addition to development on private lands.”¹⁴ The Nature Conservancy believes that the public trust and parkland doctrines require that New York State protect ecological systems on state owned land and not allow the environmental values to be damaged for the benefit of energy production.

Chapter 4: Strategy 3: Invest in Energy and Transportation Infrastructure

The Nature Conservancy supports the development of a Climate Action Plan as recommended on page 53 of the Plan and as outlined in Governor Paterson’s Executive Order 24. The Conservancy supports the goal of reducing greenhouse gas emissions 80% by 2050, and was also pleased to see that the Executive Order required the Climate Action Plan to include an adaptation plan for New York State. The Nature Conservancy strongly supports New York’s work to facilitate the adaptation of natural resources to climate change. We believe that this component of the plan can build upon work done by the Sea Level Rise Task Force, projects sponsored by the New York State Energy and Research Development Authority (NYSERDA) and could capitalize on funding included in the Regional Greenhouse Gas Initiative (RGGI) Spending Plan for adaptation programs. Funding for natural resources adaptation in New York State should be expanded, and this should be a component of the Climate Action Plan. The Climate Action Plan should be developed with the full engagement of stakeholders, and The Nature Conservancy stands ready to participate in this process.

The Plan states, “Over the planning horizon, there are a number of electricity generation infrastructure issues that will need to be addressed, including: (1) improving the power plant siting process to facilitate the deployment of renewable and other necessary resources, (2) reducing the climate impacts of coal, and (3) encouraging the repowering of existing facilities to improve the efficiency of the electricity system.”¹⁵ The state should tie approvals of energy

¹³ p. 50

¹⁴ p. 51

¹⁵ p. 54

projects to their proximity to transmission facilities that are either existing or planned, which will create efficiency monetarily, and may reduce environmental impacts.

The Plan recommends that, “the State should initiate a study to inventory existing utility corridors used for electric, natural gas, petroleum products, water and telecommunications facilities that are underused or can be expanded to accommodate new facilities, along with highways, railroads, and waterways. Improve and coordinate efforts to identify and promote the use of linear property interests for use of existing and siting new electric and gas transmission facilities.”¹⁶ The Nature Conservancy supports the inventory of existing utility corridors to reduce impacts of new rights of way on forests and other natural resources however, the inventory should include an evaluation of each potential or existing corridor’s environmental values.

The Plan further recommends that, “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.”¹⁷ The use of state owned lands for transmission and distribution infrastructure could violate the public trust or parkland doctrines, and sensitive public lands should be protected from these uses.

The Plan suggests the state should actively take steps to reduce delays and facilitate investment in natural gas infrastructure including LNG facilities.¹⁸ This is to be done by providing pre-application indications of acceptable sites for the siting of such facilities. However, there is no conversation about how these sites will be selected, nor what the criteria for selecting them shall be. This detail is critically important to The Nature Conservancy, and is another example of the importance of the development of a statewide siting program that includes mapping overlays of potential energy development sites with sensitive ecosystem. If done correctly, that framework or program could direct projects to the best locations for development and reduce impacts to natural resources, rather than reacting to submitted proposals.

Conclusion

The Nature Conservancy in New York thanks the Energy Siting Board once again for the opportunity to comment on the Draft 2009 State Energy Siting Plan. As demonstrated in other regions of the United States and internationally, The Nature Conservancy is committed to working with state and local governments, conservation partners, industry, local communities and other stakeholders to create a science-based, proactive planning process for energy siting in New York State that will allow for the prevention or mitigation of negative impacts of energy siting on wildlife and natural resources, the reduction of greenhouse gas emissions, and an increase in energy efficiency in generation and transmission systems.

¹⁶ p. 60

¹⁷ p. 60

¹⁸ p. 61

We look forward to continued collaboration with the state and all other relevant stakeholders on this very important issue for New York.

Sincerely,

A handwritten signature in black ink that reads "Bill W." followed by a long, sweeping horizontal flourish that extends to the right.

William H. Ulfelder
New York State Director

Cc: Hon. Robert Sweeney, Chair, Assembly Environmental Conservation Committee
Hon. Antoine Thompson, Chair, Senate Environmental Conservation Committee
Thomas Congdon, Deputy Secretary for Energy
Judith Enck, Deputy Secretary for the Environment
Commissioner Pete Grannis, NYS Department of Environmental Conservation
Commissioner Carol Ash, NYS Office of Parks, Recreation and Historic Preservation