

**NEW JERSEY NOISE CONTROL COUNCIL MEETING  
NOVEMBER 9, 2010,  
MINUTES**

**NCC ATTENDEES:** J. Lepis (Chairman, Civil Engineer), A. Schmidt (Vice Chairman, Public Member-Registered Environmental Health Specialist), J. Feder (Secretary, Public Member-pending confirmation), R. Hauser (DOL, Member), I. Udasin (Public Member-Medical Doctor), J. Kapferer (Public Member), T. Pitcherello (Member-NJDCA), N. Dotti (Public Member), John Surmay (Public Member – Local Governing Body), S. Szulecki (Public Member-pending confirmation, Ecologist), Mike Klewin (NJMVC), Eric Zwerling (RTNAC), D. Triggs (NJDEP).

**I. ADMINISTRATIVE**

Draft minutes of the October 12, 2010 meeting were distributed. However, emailed proposed changes by Mr. Triggs were not yet incorporated. Final review was deferred.

Mr. Triggs announced organizational changes at the NJDEP in which Ms. Trisha Conti has assumed oversight of the NCC from Ms. Debbie Pinto, who had been reassigned to Solid Waste Enforcement. The group looks forward to working with Ms. Conti and bringing her up to speed on the spectrum of issues faced by the NCC. The NCC enjoyed working with Ms. Pinto and wishes her well in her new assignment!

Chairman Lepis reported the results of his contact and discussion with Ms. Tricia Caliguire of Governor Christie's office regarding the NCC's work to date regarding wind power generation. Ms. Caliguire asked to receive a copy of the NCC's November minutes on this topic. In addition, Ms. Caliguire indicated that she would look into why the NCC is slated for elimination.

**II. STAR LEDGER ARTICLE ON AIRCRAFT REROUTING OVER NJ**

Mr. Triggs showed a headline article from the Star Ledger reporting on JFK aircraft rerouting over NJ. Secretary Feder reported that this was not new news and had been in the works since the issuance of a 2007 Environmental Impact Statement (EIS) by the FAA. This plan, which is highly unfavorable for New Jersey, had been unsuccessfully litigated across five states, including, New Jersey counties of Union and Bergen as well as the City of Elizabeth. With the help of the NCC, the NJDEP had filed an Amicus brief in support of this litigation. Unfortunately, the case was ultimately lost in the Washington DC Court of Appeals, and aside from pressuring the Port Authority of NY and NJ to oppose implementing parts of the plan, there is question as to what can be done at this point.

Chairman Lepis expressed the opinion that the response of the citizens of New Jersey to the rerouting of Newark Airport flights would be more significant than the JFK flights since these occur at much lower altitude.

**III. N.J.A.C. 7:29 REFERENCE TO INDUSTRIAL, PUBLIC, AND COMMUNITY SERVICE SITES AS A "RECEPTOR" CATEGORY**

Chairman Lepis distributed documentation firmly establishing that the inclusion of industrial, public and community service sites as "receptor" noise receptor categories in N.J.A.C. 7:29 back in 1994 was due to a clerical transcription error. The official New Jersey Register publication did not

contain this error, which confirms that the inclusion of “industrial, public and community service sites” did not belong in the final version of the regulation. The result is to render industrial sites subject to the same noise limits as commercial ones, which was not intended. The issue has become especially timely and relevant due to effects on the construction of the proposed Bayonne Energy Center (BEC). Conformance would require construction of a noise barrier separating the Energy Center from another industrial use, which is arguably expensive and unnecessary in this situation. The NCC had previously been discouraged from trying to fix the 1994 error in the upcoming version of N.J.A.C. 7:29 because of the difficulties in making changes at this late date. The BEC situation has raised the urgency of the problem, and upon the immediate construction impacts being pointed out, the NCC was sympathetic in trying to prevent the wasteful construction. The NCC unanimously adopted a resolution, petitioning the NJDEP to revert to pre 1994 language in the regulation and to advise the regulated community that it is not responsible for compliance with language in question.<sup>1</sup> The issue is complicated by the post 1994 bundling of public and community service sites with industrial sites, which may have noise sensitive uses requiring protection. Consequently, the resolution states intent by the NCC to reexamine requirements for these subsequently added public and community service sites.

#### **IV. WIND AND SOLAR ELECTRICITY GENERATION**

Environmental issues from wind and solar energy generation are receiving increasing attention in New Jersey and in other states. Within New Jersey, attempts to build facilities have resulted in environmental opposition and attempts to control such sites via local zoning rules, legislation, and “Right to Farm” (RTF) rules. Wind generation and related noise were first discussed at the January 2009 NCC meeting, and there have since been visits and measurements of the Ocean Gate facility as well as discussion at several subsequent NCC meetings.

##### **4.1 Wind and Solar Electricity Generation Raise Different Issues**

Mr. Zwerling reported on his testimony at an early November hearing before the State Agriculture Development Committee (SADC). Localities are attempting to control the construction of wind and solar electricity generation facilities via zoning restrictions. Since these land uses were not foreseen when the zoning restrictions were instituted, they typically require variances, which, absent other criteria, allows localities to limit or disallow them. However, wind and solar electricity generation have also been ruled by the courts as “inherently beneficial” activities, which injects bias into zoning evaluations requiring them to allow such uses unless the adverse effects are very pronounced. The State Farmland Preservation Act was also amended in 2009 to protect wind and solar electricity generation under RTF rules. However, the RTF inclusion also allows the details of such use to be regulated, which was, in part, the subject of the SADC hearings. The

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<sup>1</sup> Wording of this resolution is as follows, “Whereas the NJ Noise Control Council has become aware of a transcription error occurring in 1995, and which by further investigation in the NJ Register of that year, confirms the fact that the wording “industrial, public service or community public service” was added as a receptor category in 7:29-1.2(b), the Council hereby petitions NJDEP to correct the regulation at this time by reverting to the wording of section 7:29-1.2(b) prior to the November 1994 proposed revisions to the regulation, and to offer advice to the regulated community that it is no longer responsible to comply with said incorrect wording.

And, whereas the Council, subsequent to the November 1994 revisions also added public service and community service receptor categories to section 7:29-1.2(b), it is the intent of the Council to review the re-inclusion of these categories at a future time.”

SADC is concerned about the potential adverse impacts of inclusion of the wind and solar power generation under RTF.

Mr. Zwerling testified before the SADC that it was very important in considering regulation to distinguish between wind and solar generation, since the characteristics and impacts of these two methods are very different.

- 1) Solar generation typically produces noise during the daytime hours, when sunlight is in effect. The noise can arise from the inverters used for such generation, and from transformer “hum.” Both are subject to sound reduction via enclosures.
- 2) Wind turbine electricity generators produce sound at all hours. Sound levels typically depend on wind velocity. The sound characteristics are very different from solar. Wind turbine generation produces sound at very low frequencies, below the frequencies that are normally cited in regulation, rendering existing regulations non-protective. Because of the “all hours” aspects, when comparing with the New Jersey regulations under N.J.A.C. 7:29, the more stringent 50 decibel night sound requirement is the controlling factor. However, there are instances in which power generation is discontinued at night (by “feathering” the turbine blades) to limit night sound production. Unlike solar, it is not possible to reduce turbine blade sound production via sound enclosures without blocking the wind that is the source of the energy.
- 3) Wind turbine generators can produce a “flicker” effect in lighting in the twilight hours that is sometimes judged objectionable by nearby residences.
- 4) The sites at which each can be effective are different. Wind turbine generation requires sites with a good deal of wind. Solar generation can require significant open space.

#### **4.2 Senator Kean Legislation to Restrict the Siting of Wind Turbines Near Homes**

State Senator Sean T.Kean introduced on Monday, October 18, Bill S2374, which would prohibit the siting of large-scale wind turbines within 2000 feet of homes. Prior to the meeting, Mr. Dotti had distributed via email a July 2009 report by Epsilon Associates, Inc, prepared for Nextra Energy Resources, entitled “A Study of Low Frequency Noise and Infrasound from Wind Turbines.” The data in this report indicated that at distances of 1000 feet, the sounds produced by wind turbines in some situations might not be objectionable, and that the 2000 foot absolute limit might be stricter than necessary. Mr. Dotti suggested that due to the wide variation in types, sizes, and numbers of turbines as well as issues specific to the site, rather than have a “one size fits all” limit of 2000 feet in the legislation, it would be preferable to have performance based criteria to assess whether a proposed wind turbine generator siting was likely to cause a problem. Mr. Dotti suggested amendment of the legislation to require evaluation of proposed impacts for any proposed siting less than 2000 feet from a residential area. A study would not be required for a siting greater than 2000 feet. Although a vote was not taken, there was support for Mr. Dotti’s proposal. Senator Kean had been invited to attend the November 9 NCC meeting and indicated that he would try to have a staff member participate, but this turned out to not be possible. The NCC expects that further interaction with Senator Kean on this legislation will take place via interactions with his office and at the next NCC meeting.

#### **4.3 NCC Wind Generation Subcommittee Formed to Review Research and Determine Permissible Limits/December Meeting**

The discussions on SADC Right to Farm regulation and Senator Kean's legislation made clear the necessity to further evaluate research and regulations in other geographic areas as a basis for future NCC recommendations regarding regulation of wind turbine sounds. A "Wind Generation Subcommittee" was formed consisting of Chairman Lepis, and Mssrs. Surmay, Zwerling, Szulecki, Dotti and Triggs. Chairman Lepis stated that he would contact the SADC to facilitate future interaction, so that the NCC can provide input into the upcoming RTF noise regulation.

The subcommittees research work will hopefully serve as a basis for RTF, legislative, and future Model Ordinance regulation of wind turbine generator sound levels. The NCC intends to devote a major portion of the December meeting to wind turbine power generation.

#### **4.4 Tax Incentives May Be Stimulating Poor Siting of Wind Generation Facilities**

Prior to the November 9, meeting Mr. Dotti had circulated a "Wind Resource Map," prepared by the US Department of Energy, National Renewable Energy Laboratory, showing a map of the State of New Jersey, with graphically superimposed colors denoting areas of varying suitability for wind power generation. What was clearly evident from this map was that 90% - 95% of the state was unsuitable or only marginally suitable for such projects. The primary attractive areas were those offshore to the east of the coastline. Mr. Dotti voiced the opinion that tax rules might be providing an incentive for placing wind generation facilities in some places that are unsuitable. Secretary Feder had visited the Ocean Gate facility and found the turbine blades stationary because of insufficient wind.

#### **V. NEXT MEETING**

The next scheduled meeting is on December 14, 2010.

Respectfully submitted:

Jerome Feder