

BEFORE THE
COASTAL ZONE INDUSTRIAL CONTROL BOARD
OF THE STATE OF DELAWARE

In the Appeal of Jacob Kreshtool, et al.
from the Delmarva Power & Light Company
Gas Combustion Turbine Permit Decision

Appeal No. 221P

A hearing was held before the Coastal Zone Industrial Control Board ("the Board") on May 25, 1988 in the appeal of Jacob Kreshtool, Watch Our Waterways, and Peter W. Meyer from a decision of the Secretary of the Department of Natural Resources and Environmental Control ("DNREC") to issue a permit to Delmarva Power & Light Company ("DP&L") to install and operate two gas combustion turbines in the Coastal Zone as an expansion of its Edge Moor power plant facility under the Delaware Coastal Zone Act ("CZA"), 7 Del. C. Ch. 70. Present were Donald F. Crossan, Chairman; John Allen; Eugene Bookhammer; Harry M. Fisher III; Esquire; Jan Robinson; John Super and Robert Tunnell, Esquire, Members of the Board. Deputy Attorney General Regina M. Mullen acted as legal counsel to the Board.

Jacob Kreshtool, Esquire, appeared on his own behalf. Dr. Jerry A. Shields, president of Watch Our Waterways, appeared for that organization. Mr. Meyer appeared on his own behalf. Ted Wilson testified in support of the appellants.

Deputy Attorney General Kevin Maloney represented DNREC.

Dale G. Stoodley, Esquire and Peter F. Clark, Esquire

represented DP&L. Howard Cosgrove, Executive Vice President and Robert F. Molzahn, Manager of Environmental Affairs, testified for DP&L. Wayne E. Bradley of Stone and Webster Engineering Corporation also testified on behalf of DP&L.

Pursuant to notice and to its practice, the Board also received statements of position from Grace Pierce of the Delaware Audubon Society and Fred Carlson, a resident of the area.

At the conclusion of the Hearing, the Board announced its unanimous decision to affirm the Secretary's permit decision with a modification to one of the permit conditions.

SUMMARY OF THE EVIDENCE

On March 25, 1988, after a hearing, the Secretary of DNREC issued a Coastal Zone Act permit decision granting a permit to DP&L to expand its Edge Moor power plant facility by adding two combustion turbines, each of which can generate 100 MW(e) of electricity. The permit was subject to the following conditions: first, that DP&L must operate the turbines in a manner and demonstrate by on-site testing that the noise generated is "attenuated to the extent that it does not annoy or disturb persons of normal sensitivity in neighboring residential and commercial areas," and second that DP&L must demonstrate good faith efforts to remedy existing noise problems with Unit 5.

Jacob Kreshtool filed a timely appeal from the Secretary's decision. Watch Our Waterways and Peter W. Meyer joined in Mr. Kreshtool's appeal.

Mr. Kreshtool first argued that the turbines constituted a heavy industry use under the Coastal Zone Act and therefore were absolutely prohibited. He also argued that DP&L had lost its nonconforming use at Edge Moor when it converted from coal in 1977. After hearing the parties, the Board concluded that these objections went to a prior status decision issued by the Secretary, which found that the turbines were subject to the CZA but did not constitute a heavy industry use and did constitute an expansion of an existing nonconforming use. No timely appeal was taken from that status decision, and the Board will not permit that matter to be raised for the first time at this Hearing.

Mr. Kreshtool testified that the turbine project was "massive." As he understands it, modular units could be added later. The smokestack associated with these turbines is 213 feet high. Mr. Kreshtool said that this created a negative aesthetic effect. Furthermore, he testified that the existing Unit 5 at Edge Moor has serious noise problems and that two additional turbines would increase the noise problems.

Mr. Kreshtool testified that he lives 2 1/2 miles from the Edge Moor plant. He said that the noise is so bad that he and some of his neighbors cannot use the sides of their houses which face the plant. He said that "noise of this kind is a torture." He made reference to the Hearing Officer's Report dated March 18, 1988, which recounted testimony before the Hearing Officer on the noise issue. Mr. Kreshtool also testified that the noise would

affect recreational areas, specifically Fox Point Park, which is located along the Delaware River and is the only public park in the immediate vicinity of the neighborhoods adjacent to Edge Moor.

On cross-examination Mr. Kreshtool admitted that he made no independent investigation of reports of "environmental violations" which he submitted to the Hearing Officer. He said further that he had not communicated with DP&L about the noise problem. Mr. Kreshtool testified that he initially thought that the noise was generated by Route 495, but when 495 was closed this year, the noise problem persisted, and he concluded that it must be DP&L.

Mr. Kreshtool also testified that DP&L has certified to the U.S. Department of Energy that these turbines would be "coal capable" if it became necessary to use coal. Mr. Kreshtool said that a coal gasification plant would have to be constructed on site for this purpose and that the environmental impact of burning coal was significantly greater than that of burning gas.

Mr. Wilson testified that he lives in the Fox Point area. He testified that he supports both the spirit and the intent of the Coastal Zone Act and that the point of this appeal was not the worthiness of the project but whether it was appropriate within the Coastal Zone. He said that he had no opinion on the environmental impact of the use of gas or oil. However, he objected that the company had not discussed with him, or to his

knowledge with others in the community, the use of coal at Edge Moor.

Mr. Wilson testified that he thought the discussion of the decibel ("dBA") level in the area was irrelevant. He said that there was noise and that these turbines would generate additional noise which would have a negative impact on him and his neighbors. He said he believed that DP&L should be required to cure its existing noise problem and to operate in such a manner that recreational areas like Fox Point Park would not be affected. He suggested that if the noise continues to disturb Edge Moor's neighbors, DP&L should be given 15 days to deal with it or be told to shut down their turbines. Mr. Wilson testified that the construction of the turbines would have no long-term dynamic additive economic effect for the State, and that it could have a detrimental effect on the revitalization of the Fox Point area, which is being aided by the opening of a 495 cutoff and the upgrading of the Clifton Park apartments' area. He also testified that the construction and operation would jeopardize recreational economic development. He said that there was no question that the additional turbines would be consistent with the existing industrialized nature of the area, but urged the Board to consider the cumulative effect of continued industrialization, particularly on the recreational area.

Dr. Shields then testified on behalf of Watch Our Waterways. He said that the project would be detrimental to air quality in

the Coastal Zone. He said that according to DP&L's own figures, an additional 6.5 tons of pollutants would be emitted into the atmosphere daily.

Mr. Meyer then testified on his own behalf. He said that he lived in Bellefonte about 1 1/2 miles north/northwest of the plant. Mr. Meyer said that he was worried about the heat that would be generated by the plant and by smoke. He said that he was particularly concerned about the additive effect of both the heat and noise.

Mr. Cosgrove testified about the company's capacity needs and the sharp increase in load requirements beginning in 1987. He said that in addition to urging its customers to conserve energy, DP&L believes it is necessary to increase its output to meet the needs of its customers. The combustion turbines were chosen because they are quick starting, and they can burn either oil or gas.

Mr. Cosgrove said that the company had met a number of times with community groups and had become very aware of the significance of the noise from the existing Unit 5 to the community. While he testified that the plant currently does not violate any noise laws, the company has decided to make a number of modifications to Unit 5, which would cost approximately \$2.5 million, in order to reduce the impact of the noise on the neighborhood. He testified that the company was committed to

reducing nitrogen oxides emissions and that there would be a net reduction in such emissions after the combustion turbines went on-line. He also testified as to the economic benefits of the construction.

Wayne Bradley, a registered professional engineer and a consulting noise engineer to DP&L, testified that he had been engaged by the company to assess the sound levels of the combustion turbines and their effects on the residential and commercial areas. He said that based on the tests which he performed, the project noise would be inaudible in the community and that it would not interfere with normal speech or living. He said there was nothing in the topology of the area which would generate abnormal sound wave dispersion. He described the controls that DP&L will use to contain the noise generated in the combustion turbines during operation, including encasing the turbine building in sound absorbing materials.

With respect to Unit 5, Mr. Bradley testified that it emits a low frequency tone which is audible under certain meteorological conditions; however, the sound was considerably lower than that allowed under the State's noise regulations. He said that that noise would be reduced by the modifications that DP&L is making.

Robert Molzahn testified on behalf of DP&L. He described the units to be constructed referring to DP&L's submissions to DNREC. Mr. Molzahn testified that under the worst case scenario,

the emissions of these turbines will not cause an increase in nitrogen oxides emissions. He said that there will be no significant impact on air quality under either DNREC or EPA regulations.

Ms. Pierce and Mr. Carlson both testified as to their opposition to the plant.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

In deciding whether to grant a Coastal Zone Act permit, the Secretary must consider the following factors: the environmental, economic, and aesthetic impacts; the number and type of supporting facilities required and the impacts of those facilities; the effect on neighboring land uses, including, but not limited to, the effect on public access to tidal waters, the effect on recreational areas and on adjacent residential and agricultural areas, and existing county and municipal comprehensive development or conservation plans. We must review a permit decision under exactly those conditions as well.

Based on all of the evidence, we conclude that the environmental impact will be minimal except that care must be taken to ensure that the addition of any noise does not cause the plant to come out of compliance with the existing noise regulations. On balance there appears to be a slightly positive economic effect from the construction of the gas turbines. There is job creation and revenue flow at the construction stage although there appears to be very little effect once the turbines are operational. While the appellants suggested that there could

be adverse economic impacts in the areas of recreational and commercial development around Fox Point, they presented no evidence in support of their comments.

As Mr. Meyer admitted in his testimony, the turbines are being located at an existing power generating plant in an area of existing industrialization, so this project will not present a new negative aesthetic.

Some additional supporting facilities will be necessary, for example, small propane tanks, electrical equipment such as transformers, transmission lines, towers, and substation interconnections, water storage tanks, waste water collection and pumping equipment and fuel pretreatment equipment. However, it does not appear from the evidence that these facilities will affect seriously the environmental, economic or aesthetic conditions in the neighborhood.

There has been no evidence that access to tidal waters would be affected by the construction or operation of the turbines. The continuing concentration of industry at Edge Moor cannot be seen as improving the recreational values of the Fox Point Park area. We are mindful of the significance that the park has for those who live in the neighborhoods surrounding Edge Moor. All of the testimony which we heard, however, leads us to believe that DP&L also recognizes the importance of this recreational property and is working in the community to ensure that its concerns will be addressed.

Finally, this use of the property is within the New Castle County zoning designation.

We are concerned, however, that the first condition imposed by the Secretary on the grant of this permit, that is that DP&L operate the turbines in such a manner and demonstrate by on-site testing that the noise generated by it is attenuated to the extent that it does not "annoy or disturb persons of normal sensitivity in neighboring residential or commercial areas" is vague. This vagueness seems to us to leave the residents, DP&L and the Department in the unenviable and inefficient position of having to decide on an incident by incident basis whether noise generated by the turbines is so loud that it annoys or disturbs persons of "normal sensitivity." Accordingly, we will modify the Secretary's decision to issue the permit by requiring the Secretary to modify condition one of the permit. We direct the Secretary to determine and to include in the permit what numeric decibel level reading at a specified distance is likely not to annoy or disturb persons of normal sensitivity in neighboring residential or commercial areas.

Mr. Fisher moved that the Secretary's permit decision be affirmed; however, condition number one must be modified to reflect a numeric value for the decibel level at a specified distance that DP&L must meet with regard to the turbines which are subject to this permit.

Motion was seconded by Mr. Allen and adopted unanimously.

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Donald F. Crossan

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John Allen

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Eugene Bookhammer

15/
Harry M. Fisher, III

15/
Jan Robinson

15/
John Super

15/
Robert W. Tunnell

July 2, 1988

