



Indian River Generating Station – Enforce 316(b) – Stop the Fish Kills

December 19, 2007

*Tony Hummel, P.E.
Surface Water Discharges Section
89 Kings Highway
Dover, DE 19901*

Re: Draft NPDES Permit # DE0050580 and State Number WPCC3013C/76

Dear Mr. Hummel,

The Delaware Riverkeeper Network is opposed to issuance of the draft permit (NPDES Permit # DE0050580 and State Number WPCC3013C/76) issued for the Indian River Generating Station. This permit does not fulfill the requirements of section 316(b) of the Clean Water Act.

The Indian River Generating Station primarily relies upon once through cooling to secure the needed 411 million gallons per day of cooling water for its facility. As a result, the facility impinges and entrains fish, eggs, larvae and a variety of aquatic organisms - killing them as a result of the cooling water intake, use and discharge process.

Section 316(b) of the Clean Water Act requires that the location, design, construction and capacity of cooling water intake structures reflect the "best technology available for minimizing adverse environmental impact". Indian River, since its construction, [\[1\]](#) has been allowed to operate using once through cooling, which does *not* reflect the best technology available (BTA) and therefore does not comply with the section 316(b) requirements of the Clean Water Act. When Units 2 - 3 were built and brought on line in 1980 its owners and operators (now NRG Energy Inc.) were well aware of the Clean Water Act requirements to minimize fish kills at the facility, and yet they still chose to build using the most destructive approach possible - once through cooling - and Delaware chose to permit it. That very damaging mistake must be rectified now.

There has been much activity in recent years highlighting the requirements of section 316(b). EPA's unsuccessful attempts to issue regulations guiding application of section 316(b) to existing facilities like Indian River has never negated the responsibility of Delaware, or any other state, to enforce the section 316(b) requirement of the Clean Water Act. And yet, Delaware has done just that with pretty much all of the facilities located in its boundaries. It is time to for Delaware to stop evading the requirements of the Clean Water Act and to stop allowing big money power plants and politically powerful corporations to stop evading the requirements of the Clean Water Act.

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The draft permit DNREC issued for Indian River does not even attempt to require compliance with section 316b of the Clean Water Act. Instead it allows NRG Energy to avoid the requirements of the law, to continue business as usual with its vast fish kills, under the auspices of collecting more data. In fact, according to the permit language, NRG Energy is going to be allowed another five years to operate using once through cooling while it continues to collect more data.^[2] And there is no statement, provision, discussion or requirement whatsoever of what is, could, or should be BTA at Indian River - the entire proposal for fulfilling 316b is a data gathering exercise. And there is no explicit requirement or timeline associated with identification of, and then implementation of, BTA for Indian River - again all that is being required is data collection and study which could stretch out during the entire length of the new permit period (5 years). The draft permit is thus illegal in that it lacks an explicit BTA determination. Furthermore, the draft permit is also illegal in that, by allowing the Indian River plant to continue using once-through cooling (which is the worst technology available), the permit implicitly determines that once-through cooling is BTA, a conclusion which is obviously unsupportable.

In 2004, the U.S. EPA issued its Phase II cooling water intake structure rule to implement section 316(b) for existing power plants. That rule set a minimum national BTA standard that required entrainment reductions of 60-90 percent from once-through levels. The Phase II rule was then remanded by the U.S. Court of Appeals for the Second Circuit on January 25, 2007 *because it was not strict enough*. *Riverkeeper, Inc. v. EPA*, 475 F.3d 83 (2d Cir. 2007). Significantly, not only were Delaware Riverkeeper Network and American Littoral Society co-petitioners in that case, but the State of Delaware was also a petitioner in the case and argued (as did all of the other state and environmental petitioners) that EPA's BTA standard of 60-90 percent reduction was impermissibly weak. Astoundingly, DNREC has issued a draft permit here which fails to require the Indian River plant to meet even the minimal 60-90 percent reduction that the Phase II rule had established as BTA (and which Delaware had argued was too lax).

As the Second Circuit emphasized in its decision, section 316(b) mandates that each facility "minimize the adverse environmental impacts attributable to their cooling water intake structures to the best degree they can."^[3] Closed cycle cooling is, by all accounts, the technology that will minimize the impingement and entrainment impacts of a cooling water intake structure. ^[RS1] It is a technology that can be and should be mandated by the State of Delaware despite cost arguments that have most certainly been put forth by NRG Energy.^[4]

We are pleased that Delaware has not fallen into the same illegal pit that New Jersey continues to flounder in - allowing the use of mitigation projects for fulfilling section 316(b). The Second Circuit made clear that section 316(b) requires a technological approach, and one that is associated with the location, design, construction or capacity of cooling water intake structures. Mitigation or restoration projects are not an option. This is a position that the Delaware Riverkeeper Network has been advocating for decades, and we are pleased to have such a prestigious court finally make it clear, on the record, that mitigation does not fulfill the requirements of section 316(b).

NRG Energy, Inc. through its Indian River Generating Station, has been getting away with murder for years. It is time to put a stop to the needless fish kills. It is simply not ethically, morally or legally appropriate to put off application of section 316(b) at Indian River for another 5 years to allow for more data collection which, frankly, could have been collected during the last 27 years that the company was evading the requirements of the law.

We urge DNREC to undertake the following with regards to the Indian River Generating Station permit:

- We urge DNREC to make an explicit BTA determination in the Indian River permit, currently it lacks such an explicit determination.
- We urge DNREC to explicitly state in the permit that once through cooling is not BTA for purposes of section 316(b).

- And, in light of the fact that the plant is not complying with BTA and cannot do so immediately because it takes time to design and build retrofits, we urge DNREC to declare closed-cycle cooling as BTA for Indian River and to require the facility to start designing such a retrofit at the same time it studies costs and other possible options, so that if it is determined to be feasible for the facility and to fulfill all other elements of a BTA determination (including those related to cost), then closed cycle cooling could be on line, or at least underway, by the end of the permit cycle.

Of course, if as part of its study, NRG Energy can demonstrate that an alternative technology could achieve the same level of reductions in impingement and entrainment as closed cycle cooling as well as fill all other appropriate elements of a BTA determination then that technology too would be legally acceptable.

Let us set NRG and the Indian River Generating Station on a path to success. Instead of leaving the status quo and reopening the permit later to make a determination (only to have many years left for design and build), we urge you to make the determination now and put the burden on the company. Giving NRG an open ended pass on section 316(b) requirements does not serve the public or the company, it merely delays even further the inevitable -- implementation of appropriate BTA at Indian River. Pursuing the process as laid out above ensures that NRG has both the burden and the incentive to diligently undertake the work required for a BTA determination and implementation.

Respectfully submitted,

Maya K. van Rossum, the Delaware Riverkeeper

[1] Units 2 - 3 came on line in October 1980, Unit 1 came on line November 1957.

[2] While interim reports are required, final results from the data collection exercise will only be required when the NPDES permit renewal application is submitted - permits are in force for 5 years. See 9e of the draft permit.

[3] *Riverkeeper Inc. et. al, (including Delaware Riverkeeper Network and American Littoral Society) v. US EPA, 1/25/07.*

[4] The Second Circuit recognized the technology-forcing approach of the Clean Water Act and rebutted efforts to derail this approach to environmental protection through the use of cost-benefit considerations. In fact the Court made clear that while cost could play a limited role in identifying an array of technologies that may be available to meet section 316(b)'s BTA standard, there was no obligation whatsoever on EPA to engage in a cost-effectiveness analysis. And considering the State's right to be more protective in its environmental protection efforts the State too is free to set cost arguments aside when considering BTA within their communities. To the extent facilities raise the issue of cost, or that DNREC wants to consider it, it can only be used to determine whether the costs can be "reasonably borne" and to choose among technologies that provide equivalent impingement and entrainment reduction benefits to those of closed cycle cooling - it cannot be used to reject a technology as too costly in light of the benefits to be achieved.

[\[RS1\]](#) It has to be available to this facility. The other way that cost can (must?) be considered is to determine whether the cost of the technology can be "reasonably borne." If the cost would make them shut down, it's not reasonably borne. And while that is unlikely here, where is the data?