



For Immediate Release

September 18, 2015

Contacts:

Maya K. van Rossum, the Delaware Riverkeeper, Delaware Riverkeeper Network,
215 369 1188 ext 102 (rings office & cell)

**Comments on PSEG's Salem Permit
Document Massive Fish Kills, Avoidable Harms, and Economics of the Issue**

Trenton, NJ: The Delaware Riverkeeper Network submitted substantial comment, including two lengthy expert reports, and numerous pre-existing agency and expert analyses, on the draft Clean Water Act Permit issued for the Salem Nuclear Generating Station, by the New Jersey Department of Environmental Protection (NJDEP).

“We believe that NJDEP did a great disservice to the people of New Jersey, Delaware, Pennsylvania and beyond who benefit from and appreciate the fish and shellfish populations of the Delaware River when it issued a draft permit for the Salem Nuclear Generating Station that allowed it to continue to impinge and entrain over 14 billion fish, eggs and larvae a year from a range of species, including those in population decline and some of which are endangered,” said **Maya van Rossum, the Delaware Riverkeeper**. “Salem is surpassed in its impingement and entrainment impacts on fish by only one other facility* in the nation, Salem is the largest predator in the Delaware Estuary and Bay, and has been for over 40 years. The indiscriminate killings inflicted by Salem are unparalleled in the region, and well beyond. NJDEP had an obligation to mandate the use of the best technology available to minimize Salem’s fish kills; instead it decided to punt and allow Salem to continue with its once through operations for another 5 years – unless of course they grant the permit an administrative extension and give it a 14 year life, just like NJDEP has done with the current Salem permit,” added van Rossum.

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215) 369-1181
dmn@delawareriverkeeper.org
www.delawareriverkeeper.org

Findings in the Delaware Riverkeeper Network expert reports include:

- ✓ While PSEG asserts only \$8 million in economic value from reducing fish kills using closed cycle cooling, two other analyses show significantly higher benefits – despite the fact that these analyses do not capture the full array of benefits of closed cycle cooling, they still show benefits valued as high as \$577 million. ECONorthwest, p. vii
- ✓ 14.7 billion fish a year are impinged and/or entrained at Salem. Closed cycle cooling at Salem would reduce this mortality by over 12.8 billion. ECONorthwest, p. 4
- ✓ 14.7 billion fish impinged & entrained at Salem a year translates into 360 million fish killed in an average year that, but for Salem, would have survived to age 1. ECONorthwest, p. 4
- ✓ “These annual mortality estimates are large enough to have population-level impacts.” ECONorthwest, p. 5
- ✓ Salem has been operating with variance from DRBC’s temperature standards for nearly 40 years, this draft permit allows that variance to continue in place despite the changing conditions in the Estuary that should not allow blanket extension of the variance and despite anticipated future changing conditions: “Salem’s thermal plume under the Baseline Scenario is likely to contribute to increased mortality as water in the Delaware River increases in temperature due to climate change.” ECONorthwest, p. 6
- ✓ Reduced impingement and entrainment that would result from installation of closed cycle cooling at Salem would result in as much as \$577 million in economic benefit considering just a 20 year time frame. ECONorthwest, p. 11
- ✓ Our federal government spends nearly \$22 million a year to benefit and protect the endangered species of fish and turtle that Salem is legally allowed to kill every year. ECONorthwest, p. 21
- ✓ “...the benefit estimates provided by PSEG fail to represent and capture the total economic value of benefits...” that closed cycle cooling would provide. ECONorthwest, p. 21
- ✓ PSEG asserts it would cost between \$815 and \$852 million to install closed cycle cooling at Salem. “for the fiscal year ending December 31, 2014, PSEG’s annual operating revenues were \$5.4 billion. ... for the fiscal year ending December 31, 2014, Exelon’s operating revenues were \$17.4 billion.” And so, the annual amortized cost of closed cycle cooling at Salem would represent a mere 0.3 percent of PSEG and Exelon’s combined annual operating revenues. ECONorthwest, p. 23

- ✓ “The total installed cost of [closed cycle cooling at Salem] (\$852 million) represents about 31 percent of the companies [PSEG & Exelon, Salem’s owners] combined annual capital expenditure, and the annual loan payment just 2 percent.” ECONorthwest, p. 24
- ✓ Installing closed cycle cooling at Salem “would increase electricity rates by \$0.0036 per kWh”. ECONorthwest, p. 25
- ✓ If the costs of closed cycle cooling were passed on to residential customers of Salem the potential increase in electricity costs is only about \$26 per customer per year (for NJ customers it is likely to be lower given deregulation of NJ’s energy market).
ECONorthwest, p. 25
- ✓ “In 1993, the NJDEP determined that there was enough scientific, technical and other information to support a BPJ determination when it found “a combination of technological improvements, together with operational measures, were BTA for Salem, based upon a BPJ determination”. Since 1993 there has been significantly more data obtained regarding Salem operations.

While more data can always be collected, there is significant information on the record and available to NJDEP regarding SGS’s operations, impacts from impingement and entrainment, regarding the fish populations of the Delaware estuary, and regarding the benefit of existing technologies for addressing its adverse environmental impacts – more data is not necessary to support a BPJ determination.” CEA p. 3

- ✓ The CEA Reports supports the assertions of the Delaware Riverkeeper Network that NJDEP cannot sustain the decision to continue granting a thermal variance from Delaware River Basin Commission temperature standards and that the DRBC itself cannot allow such a variance to stand. CEA starting page 10

Copies of the Delaware Riverkeeper Network comment and expert reports can be found at:
<http://bit.ly/DRN-SalemBattlePage>

#####

*Big Bend Power Station, Tampa Bay