

limerick ecology action

BOX 761

POTTSTOWN, PA. 19464

(215) 326-9122

COMMENTS ON NUREG 0974, June 1983

Draft Environmental Statement for
Limerick Generating Station
Units 1 and 2, Dockets 50-352,353

Submitted by Phyllis Zitzer,
President of Limerick Ecology Action
August 12, 1983

a member of the environmental coalition on nuclear power

COOZ
9/1

8308180107 830812
PDR ADOCK 05000352
D PDR

limerick ecology action

BOX 761

POTTSTOWN, PA. 19464

(215) 326-9122

"The environmental impacts of postulated plant accidents will be provided in a supplement to this statement." (1)

"The plant specific review of the Limerick probabilistic risk assessment analysis of severe accidents is not complete." (2)

Yet despite this obvious lack of completion of NRC Staff reviews of the Limerick PRA and SARA, the resulting action called for by the NRC Staff in this document is,

"issuance of operating licenses for Limerick Generating Station, Units 1 and 2." (3)

Furthermore, the only discussion of emergency planning impacts is ludicrous. "The Staff believes the only noteworthy potential source of impacts to the public from emergency planning would be associated with the testing of the early notification system." (4) The next sentence discusses noise levels from existing alert systems and concludes that noise impacts will be "infrequent and insignificant". (5)

Most of the rest of this document attempts to justify continued construction and operation of the Point Pleasant water diversion plan for use at Limerick.

For the record, Limerick Ecology Action wishes to bring to your attention the attached letter from the U.S. Fish and Wildlife Service, dated July 20, 1983 that discusses alternatives to the construction of the Point Pleasant water diversion and the Merrill Creek Reservoir.

In view of the conclusion already recommended by the NRC Staff in regards to the issuance of an operating license, members of LEA question whether the NRC intends to objectively review the revised contentions, testimony and litigation yet to be filed in this proceeding by intervenors in this case.

(1) Abstract iii, DES

(2) Summary & Conclusions viii, DES

(3) Abstract iii, DES

(4) (5) p.5-91, DES

a member of the environmental coalition on nuclear power



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
One Gateway Center, Suite 600
NEWTON CORNER, MASSACHUSETTS 02158

JUL 20 1983

Mr. R. Timothy Weston
Deputy Assistant Secretary
Pennsylvania Department of
Environmental Resources
P.O. Box 1467
Harrisburg, Pennsylvania 17120

Dear Mr. Weston:

This responds to your June 1, 1983, letter to Director Jantzen requesting the Service's comments on three alternatives to supply water to the Limerick Nuclear Generating Station, Chester and Montgomery Counties, Pennsylvania.

Alternative 1 (reduction of Schuylkill River flows/use of Blue Marsh storage).

DRBC Docket No. 69-310 CP placed two restrictions on water withdrawn from the Schuylkill River at Limerick: a) flows at the Pottstown gage must exceed 530 cfs with one unit operating and 560 cfs with two units operating; and b) there must be no withdrawals when water temperatures below Limerick exceed 15°C, except during April, May, and June when the flows as measured at the Pottstown gage exceed 1,791 cfs.

Use of this alternative would not require relaxation of the 530/560 cfs flow restriction established by the DRBC. It would require only that attention be given to identifying and utilizing the potential for storing sufficient makeup water in Blue Marsh Reservoir (see discussion of Blue Marsh under Alternative 2). Given a recurrence of the 1965 drought, approximately 8,000 acre-feet of stored water would be required to meet DRBC's flow restriction of 530 cfs with one unit operating at maximum output. There are 8,000 acre-feet of storage currently in Blue Marsh Reservoir for industrial and municipal use and another 6,600 acre-feet for water quality control downstream. We believe that the Philadelphia Electric Company could operate Unit 1 using the Blue Marsh Reservoir as an interim source of make-up water until environmentally-sound storage facilities could be developed. Initiation of operation of Unit 2 and continued long-term operation of Unit 1 should be contingent upon either expanding existing storage reservoirs or developing new sources of storage in the Schuylkill drainage. In any event, we do not recommend that the required flows of 530 and 560 cfs be reduced in any alternative plan.

We believe that the second restriction could be relaxed without degrading water quality downstream. The restriction was originally designed to protect water quality and fishery resources and appears somewhat conservative in light of results of the 1976 COVAMP Study for the Schuylkill River. For example, the water quality model developed for the study predicted very few violations of State standards for dissolved oxygen in the Philadelphia area at a flow of 290 cfs and a water temperature of 29°C. The study also predicted that water quality would improve in the future as more sewage treatment plants were upgraded. The Department of the Interior's 1968 Water Quality Control Study for Blue Marsh Reservoir made similar observations, indicating that dissolved oxygen levels in the lower Schuylkill River did not drop below 4.0 mg/l until flows were less than 300 cfs. Any proposal or plan to relax the second constraint on withdrawal should be based upon a thorough investigation of the relationship between consumptive withdrawals at Limerick and resultant water quality alterations downstream, particularly those involving water temperature and dissolved oxygen.

Alternative 2 (Construction of the Red Creek Reservoir).

In letters dated February 23, 1974, and June 25, 1974, the Department of the Interior recommended the Licensee consider make-up water storage sites in the Schuylkill River Basin. More recently, the Department's October 28, 1982, letter on the draft Environmental Impact Statement for the Merrill Creek Reservoir Project recommended the re-evaluation of storage reservoirs on the Schuylkill River as less environmentally damaging than the Merrill Creek site. During the screening of alternative sites for the Limerick Nuclear Generating Station make-up water storage, the Red Creek site was eliminated primarily because of poor water quality and the Blue Marsh site because it would not be completed in time. However, delays in constructing the Limerick Nuclear Generating Station have changed the status of these two sites.

Because of reduced mining effort and the success of reclamation projects upstream of the Red Creek site, water quality in the Schuylkill River has significantly improved in the past six years. The Red Creek site could now withdraw reasonably good quality water from the Schuylkill River with pH in the range of 6-7 units. We now believe that water quality in a reservoir on Red Creek would support a good warmwater fishery. Furthermore, discharges from the reservoir would benefit aquatic organisms in the Schuylkill River during low flow periods. Therefore, the Red Creek site appears well suited for fulfilling the need for additional storage in the Schuylkill River Basin (although perhaps not uniquely so).

The Blue Marsh Reservoir is now completed and operational. The necessary additional make-up water storage capacity for the Limerick Nuclear Generating Station could be made available by raising the pool level in the Blue Marsh Reservoir 6 feet for one unit and 9 feet for two units. This would permanently flood an

additional 300 and 450 acres of land, respectively. Either alternative reservoir site on the Schuylkill River would eliminate the need for building the Point Pleasant Diversion project, Bradshaw Reservoir, and possibly the Merrill Creek Reservoir. Sites on the Schuylkill River would benefit water quality by providing additional flows during low water in the river.

Alternative 3 [Bradshaw Reservoir/Bradshaw Pump Station (Point Pleasant)].

The Service has advised against constructing the Point Pleasant Diversion project for numerous reasons. Our March 11, 1980, and December 16, 1980, letters to the ERBC identified and discussed at least 12 specific adverse environmental impacts that could result from constructing and operating the Point Pleasant project. Our letters of June 19, 1981, and March 26, July 12, and September 14, 1982, to the Corps of Engineers presented additional reservations about the proposed project. We summarized our concerns again in our letter of October 18, 1982, which recommended denial of the Department of the Army permit for the project. Throughout all of our communication with ERBC and the Corps, we maintained that there were environmentally preferable alternatives to the Point Pleasant project.

In summary, from a fisheries conservation and management perspective, of the three alternatives that you proposed we would prefer Alternative 2.

If we can be of further assistance, please do not hesitate to ask.

Sincerely yours,

Howard N. Lazen

Regional Director

South Coventry refuses to accept PE evacuation plan

By MIKE CONTOS
Mercury Staff Writer

South Coventry Township officials this week refused to take part in evacuation plans for the nuclear power plant in Limerick and said they would approve no plans until someone other than the township pays for a survey of municipal emergency resources.

The rural Chester County township declined to "fill in the blanks" on a draft plan Philadelphia Electric Company's consultant presented officials Monday. The refusal was the first by any of the 42 municipalities within a 20-mile radius of Limerick involved with the evacuation planning.

"We're not going along with any plans until PE shows us who is going to pay for it," said Richard Whitlock, chairman of the three-member board of supervisors.

Whitlock said Energy Consultants, the firm retained by PE to work with municipalities and school districts to create individual evacuation plans, presented a draft proposal to the township on Monday. The supervisor said the proposal was a simple form given to all municipalities with blank spaces to fill out.

"There are too many gaps in the forms and a lot of unanswered questions," Whitlock said. "We're not going to approve something for them (Energy Consultants) to send to the NRC (Nuclear Regulatory Commission)."

Whitlock said South Coventry was not the only municipality declining to take part in evacuation plans and that many townships and boroughs throughout the nation are holding back until learning clear-cut methods of funding for the preparations.

He cited a recent investigation by the General Accounting Office, Congress' investigative arm, which leveled heavy criticism at the NRC for accepting evacuation plans that were deficient. The investigation said there are no minimum planning standards for evacuations and no follow-up procedures.

In recent months the NRC has encountered difficult emergency planning problems with two reactors near densely populated New York City — Indian Point in Westchester County and Shoreham on Long Island. In the case of Shoreham, Suffolk County authorities have refused to cooperate in setting up evacuation plans, and are jeopardizing the start-up of the plant.

"I object vehemently that under the draft plan residents of South Coventry Township would have to be evacuated to two different locations," Whitlock said. He added the plan called for 90 percent of the 1,644 residents to head west along Route 23 to the Morgantown area, while the rest would be evacuated south along Route 100 into Downingtown.

"If we have to evacuate, there will be no spitting of South Coventry Township," Whitlock said.

All municipalities within a 20-mile range of the Limerick site have been presented draft plans to provide for a mass evacuation of shut-ins, the blind and the disabled, as well as the able-bodied. The municipalities have been asked to research their emergency resources and forward the information to their respective county governments.

The state is ultimately responsible for a master evacuation plan. It is undetermined if an individual plan could be forced onto South Coventry without the approval of the local officials.

32 — The Mercury, Pottstown, Pa. — Wednesday, August 3, 1983

GAO says nuclear evacuation plans are deficient

WASHINGTON (UPI) — Emergency evacuation procedures at nuclear power plants may be seriously deficient because the government has no minimum planning standards and no training requirements, the General Accounting Office charged Tuesday.

The GAO, Congress' investigative arm, leveled the heavy criticism at the Nuclear Regulatory Commission and the Federal Emergency Management Agency during a House Interior subcommittee hearing on emergency preparedness for the nation's commercial reactors.

Committee Chairman Edward Markey, D-Mass., said its investigation shows neither agency has a regulation "defining the minimally acceptable conditions necessary to justify the operation of a nuclear plant with respect to emergency preparedness."

The NRC and the emergency management agency have struggled for years to develop standards that local and state governments and utility companies can use to set up emergency evacuation procedures for the surrounding population in the event of an atomic reactor accident that releases deadly radiation.

In recent months, the agencies have encountered the most difficult emergency planning problems at two reactors near densely populated New York City — Indian Point in Westchester County and Shoreham on Long Island.

In the case of Shoreham, owned by Long Island Lighting Co., Suffolk County authorities have refused to cooperate in setting up evacuation plans, which is jeopardizing the start-up of the new plant.

In testimony to the subcommittee, GAO official Ralph Carlone said the study uncovered several major problems with the federal government's evaluation and approval of reactor emergency plans:

— "The Federal Emergency Management Agency has not established minimum standards that (test) exercises must meet," and has approved exercises that "did not provide ample opportunity to demonstrate response capabilities."

— "Plans for training federal, state and local government officials have not been implemented. As a result, it is uncertain whether public officials and emergency workers will know how to best respond in a nuclear power plant emergency."

— The agency "does not always require that all plan elements are tested, or verify that they are complying with federal criteria."

— It "does not have follow-up procedures for ensuring that deficiencies from previous exercises are corrected. . . . In some instances (it has) concluded that preparedness is adequate even though it has no evidence that deficiencies from earlier exercises have been corrected."

Carlone told the panel emergency planning around U.S. reactor sites also is hampered by lack of a "clear-cut method for funding" preparation and testing.

As a result, local communities that want to prevent or delay the start-up of a reactor, he noted, use "their refusal to participate in the emergency planning process to achieve their objectives."

Limerick Foes Ask: Is This Nuke Necessary?

By ALEXANDER REID
Daily News Staff Writer

In the farmlands and meadows of western Montgomery County, a legion of craftsmen and technicians works feverishly in the shadow of two 570-foot concave cooling towers.

The bustle of activity on this rural landscape belies the uncertainty surrounding Philadelphia Electric's Co.'s nuclear plant in Limerick Township, near Pottstown. As the scheduled spring 1985 start-up nears for the first of two reactors on the 587-acre site, the debate over the plant's necessity and dangers is heating up.

Foes argue that the twin reactor complex is unnecessary, uneconomical and unwanted.

And they note that the reactors have a life-span of about 40 years, rendering the plant useless well before the middle of the 21st century.

"We don't think there is enough water around here to operate the units. And the power that they're supposed to generate is not needed," said Phyllis Zitzer, head of Limerick Ecology Action, one of a host of citizens' groups opposed to Limerick. "With the rate hikes needed when this thing goes into service, it's not economical ... Nobody wants Limerick but PECO."

Limerick would be the closest nuclear power plant to Philadelphia and its 1.7 million residents, a fact that alarms an anti-nuclear power movement galvanized by the accident at Three Mile Island in 1979.

Philadelphia, 20 miles from Limerick, is not among the 43 municipalities devising emergency evacuation procedures. Only the towns within a 10-mile radius of the complex are required by the U.S. Nuclear Regulatory Commission to develop emer-

gency plans.

In spite of the opposition — and lack of independent support for the project — PE is determined to complete Limerick.

During the primary election campaign in Bucks County last May, the utility poured \$823,000 into an unsuccessful effort to influence voters to pass a non-binding referendum construction of the Point Pleasant water-diversion project. Water from the project is needed for Limerick.

On July 22, in response the state Public Utility Commission's 1982 order urging PE to cancel or suspend construction of Unit II at Limerick, the utility announced a plan to complete both units within five years.

Using a revolving loan agreement, arranged through a syndicate of 25 U.S. and foreign banks including New York's Citibank, PE would borrow \$1.1 billion for the eventual completion of the Limerick project. Unit I would begin operation in 1985, Unit II in 1987.

Several consumer groups are preparing complaints with the commission on PE's plan. A decision is expected late next month.

One group, the Consumer Education and Protective Association, chartered a bus loaded with Limerick opponents yesterday and met with Citibank representatives in Manhattan to voice its criticisms.

"We want the banks to take into account the community's feeling on this," said Max Weiner, a consumer activist who heads CEPA. "If we demonstrate enough awareness, we think we can have the whole deal nixed."

PE says the plan will allow it to delay issuing mortgage bonds — the normal method for raising revenue — until the first reactor is included

"We certainly believe that both units are in the best interest of our customers."

Neil McDermott,

Philadelphia Electric Co. spokesman

in the rate base and the company's financial condition improves. The utility, bled by Limerick costs over the years, currently has a bond credit rating of BBB-minus from Standard & Poor's Corp. and Baa3 from Moody's Investor Service. (The ratings are considered the lowest for "investment-grade" bonds; lower ratings would put the bonds in the "speculative" class, raising the interest rates the company would have to pay to borrow money.)

PUC approval of the financing arrangement would represent significant progress toward completion of a project first proposed in 1969.

When construction began on the reactors in 1974, PE estimated Limerick would be completed by 1980 at a cost of \$1.5 billion.

Construction delays and inflation have pushed the price tag for the units up to what officials estimate will be nearly \$6 billion when they are completed. That will be about half of PE's assets.

For PE's 1.3 million customers, the plant will mean hefty rate increases if the commission approves the financing plan. Before each reactor goes into commercial operation, PE will seek 20 percent rate increases.

PE officials maintain that the twin units are needed to replace costly and soon-to-be outmoded means of energy production, such as oil-fired systems.

"We certainly believe that both units are in the best interest of our customers," said Neil McDermott, a company spokesman. "We have given the commission a plan that we feel is workable to the completion of both, and we are looking to complete both reactors."

Limerick's opponents, rallied by the proposed financing plan, do not share PE's optimism. They say the utility is embarking on a financially risky course to push the nuclear plant into operation.

"Their financial agreement attempts to trade claimed short-term benefits for long-term burdens," said Steve Hershey, a Community Legal Services lawyer who represented several citizens' groups during a 1980 PUC investigation of Limerick.

"For instance, the banks say that Unit I has to go into the rate base in a timely manner, which means by 1985. Suppose something goes wrong with construction or the company has problems working out the evacuation procedure, which they are having trouble doing now? Let's say they don't get their license within the next year. The operating date could be held up and the banks could withdraw the loan, and that would be a disaster for PECO and obviously their customers."

Critics of the arrangement also target the revised construction schedule, which they say violates the

1982 PUC order that PE scrap or delay Unit II until the first reactor is completed. The simultaneous construction of both reactors, it said, poses financial consequences for ratepayers and stockholders.

Later this year, as they complete work on Unit I, a workforce of about 200 craftsmen and engineers would resume work on the second reactor, which today is 30 percent complete.

By 1985, when the first reactor is scheduled to go on line, 1,900 workers will be engaged in construction on Unit II and PE will have spent \$501 million on the reactor.

PE says construction on both units is feasible now because the plan hurdles the financial obstacles faced by the company last year, when the PUC first issued its order.

"When the commission made that ruling, they didn't think we could raise the money to build Unit II until we built Unit I," said Joseph F. Paquette Jr., PE's vice president for finance and accounting. "We feel ... we can convince them ... that we can carry out work on both units."