



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 17 1979

NRE PRR

Mr. Norman Buonanno
Maryhill Road
Phoenixville, Pennsylvania 19460

Dear Mr. Buonanno:

Your letter dated April 2, 1979 to the President of the United States has been referred to me for reply. Your letter discussed the diversion of water from the Delaware River to the Limerick Generating Station, Unit Nos. 1 and 2. Your letter stated that the dependence on cooling water from the Delaware River poses an unacceptable risk to the people living around the plant.

In responding to this concern, I would like to point out that the cooling water required to safely shutdown the nuclear reactors in the event of an emergency or an accident will not depend on water from the Schuylkill River or water diverted from the Delaware River. The NRC requires that a plant's design include a reserved supply of water (called the ultimate heat sink) which can cool the plant for 30 days without the addition of water from other sources. The proposed ultimate heat sink for the Limerick facility is a spray pond. The embankments which form the pond, and the pipes and pumps which bring the water into the Limerick facility, must be designed to withstand the effects of natural phenomena like earthquakes, hurricanes and tornadoes. Loss of the normal water supply, be it water from the Schuylkill or Delaware River, will not prevent safe shutdown of the facility's reactors.

During most of the year, the Limerick facility will obtain makeup water for the cooling towers from the Schuylkill River. The cooling towers cool the water from the main condensers; a main condenser, in turn, condenses the steam discharged by a main turbine. The facility could not generate electricity if there were prolonged periods when makeup water is not available. The Delaware River Basin Commission (DRBC) has established when the Limerick facility can obtain water from the Schuylkill River. The DRBC requires that the flow in the Schuylkill River at the facility be greater than 550 cubic feet per second and that the temperature of the water be below 59 degrees Fahrenheit. With these limits, based on historical data for the Schuylkill River, we calculated that the Limerick facility would not be able to generate electricity for 47 days during a typical year unless an alternate source of makeup water, such as the diversion of water from the Delaware River was provided.

The interruption in electrical generation due to low flows in the Schuylkill River would also occur if the turbine generators were powered from a coal, oil, or gas-fired boiler. Prior to the issuance of the construction permits for the Limerick facility, the NRC evaluated alternatives to a nuclear facility at the

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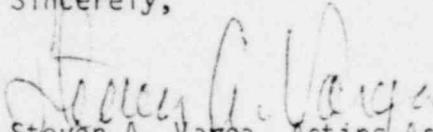
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Limerick site. NRC's Atomic Safety and Licensing Appeal Board (ASLAB) concluded that all other potential sites in the region for an electrical generating station had similar operational problems concerning availability of water, therefore the shortage of makeup water at the Limerick site did not prevent the construction of nuclear units. Furthermore, the ASLAB ruled that the environmental costs and benefits weighed in favor of constructing the Limerick facility.

We trust that this information is responsive to your concerns.

Sincerely,



Steven A. Varga, Acting Assistant Director
for Light Water Reactors
Division of Project Management

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No. 79-100 Logging Date 4/11/79

NRC SECRETARIAT

- TO: Commissioner _____ Date _____
 Exec. Dir./Oper. _____ Gen. Counsel _____
 Cong. Liaison _____ Solicitor _____
 Public Affairs _____ Secretary _____

White House referral from

Incoming: Norman Buonanno
 From: Maryhill Rd.
Phoenixville, Pa. 19460
 To: NRC Date 4/2/79
 Subject: Concerns over Limerick ~~XXXXXX~~ reactor
in light of Three Mile Island accident

- Prepare reply for signature of:
 Chairman _____
 Commissioner _____
 EDO, GC, CL, SOL, PA, SECY
 Signature block omitted

 Return original of incoming with response

- For direct reply*
 For appropriate action
 For information
 For recommendation

Remarks: Logged Ex Parte. ~~XXXXXX~~: Origin? to Docket

For the Commission: Combs

*Send three (3) copies of reply to Secy Mail Facility

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ACTION SLIP

7.4

Maryhill Road
Phoenixville, Pennsylvania 19460
April 2, 1979

To: The President of the United States

Dear Mr. President:

~~In light of the problems at the Three-Mile Island Nuclear Power Plant,~~
I would appreciate your having the Nuclear Regulatory Commission review
the construction of Philadelphia Electric's Limerick, Pennsylvania plant.

It is my understanding that there is an insufficient supply of water available near this plant for cooling the reactor. This information was known to the NRC prior to the licensing of the construction of this plant. The licensing was granted based on Philadelphia Electric's plan to pipe water from the Tock's Island Dam or the Delaware River. Since the Tocks Island project has been scrapped, it leaves the piping from the Delaware. In the first place, I question the wisdom of constructing a nuclear plant in an area where sufficient water to cool the reactor is not available. In the second place, a water pipeline of about 35 or 40 miles is vulnerable to sabotage, earthquakes, etc.; so any disruption in the supply of water would have catastrophic consequences on the area.

If the water supply in the area is not sufficient to cool the reactor, I feel an immediate cessation of construction should be ordered regardless of the money spent thus far in constructing this plant.

Sincerely,

Norman A. Buonanno
Norman A. Buonanno

cc:
Governor Richard Thornburgh, Gov. of Pennsylvania
Senator Richard Schweiker
Senator John Heinz
Congressman Richard Schulze
Congressman Lawrence Coughlin
Pennsylvania State Sen. Peter Vroom
Pennsylvania State Sen. John Stauffer

REPLY REQUESTED

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