

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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USNRC

ATOMIC SAFETY AND LICENSING APPEAL BOARD

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Administrative Judges:

OFFICE OF SECRETARY

Christine N. Kohl, Chairman
Stephen F. Eilperin
Dr. Reginald L. Gotchy

In The Matter of	:	Docket Nos. 50-352
	:	50-353
PHILADELPHIA ELECTRIC COMPANY	:	
(Limerick Generating Station	:	
Units 1 & 2)	:	

APPELLANTS' BRIEF IN SUPPORT OF
EXCEPTIONS FROM PARTIAL INITIAL DECISION

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dated August 15, 1983 Exhibit "A"

Copies of excerpts of prepared testimony of Robert Goodell,
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Letter dated December 6, 1980 to DRBC & EPA Exhibit D

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Position paper of DRBC staff July 1, 1983 Exhibit F

Freedom of Information Act request to obtain documentation
as to staff's complaints Exhibit G

Financial Analysis of project performed for Bucks County
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NRC staff response to Fish & Wildlife proffer of information
to be included in DEIS Exhibit I

July, 1982 Fish & Wildlife Service volunteered its assistance
in preparation of DEIS Exhibit J

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EXCEPTIONS FROM PARTIAL INITIAL DECISION

Del-AWARE Unlimited, Inc., et al., appellants from the partial initial decision of the Licensing Board, have filed detailed exceptions from the findings and conclusions of the Licensing Board, reflected both in interlocutory orders, and the partial initial decision itself.

I. THE BOARD ERRED IN REFUSING TO CONSIDER THE
IMPACTS OF THE DIVERSION DEPLETIVE USE ON SALINITY
AND WATER QUALITY LEVELS IN THE DELAWARE RIVER AND
RECEIVING STREAMS

The Board held that this matter was disposed of by the DRBC. (SPCO of June 1, 1982, decision on reconsideration, July 14, 1982, September 3, 1982) After discovery brought to light documents showing that the staff had recognized that it had undertaken the obligation to study these matters (letter of PECO January 5, 1981, attached to Motion of _____, 1982 as Exhibit _____),

Del-AWARE once again raised this issue with the Licensing Board. On grounds that it was untimely, and that its decision was correct the first time, the Licensing Board again refused to consider this issue. Accordingly, evidence as to this issue was excluded in hearings before the Board, and no findings were made which address this issue. It is for this Appeals Board as to whether, on the facts and issues presented by the intervenors, the Licensing Board should have considered this issue.

Since the partial initial decision and the Board's interlocutory decisions on this subject, the staff has published a draft EIS on the operating phase of Limerick. This draft EIS purports to update previous environmental findings, and, inter alia, purports to update the previous findings on this subject by reference to DRBC and Pennsylvania Department of Environmental Resources (DER) publications and states that the staff continues to endorse their findings (with respects to impacts on the Delaware River through the depletion). A similar statement is offered with respect to impacts on receiving streams. (DEIS at pp. 5-2 to 5-9).

The inclusion of this material in the DEIS, and its concurrent exclusion by the Licensing Board is a stark contradiction of the duty of an administrative agency to pursue its mandate under the National Environmental Policy Act. Under the Calvert Cliffs, this agency has a responsibility to prepare and EIS and take a hard look at

the environmental consequences of nuclear facilities, including repairing an omission to do so previously. Calvert Cliffs Coordinating Committee v. AEC, 499 F.2d 1109 (D.C. Cir. 1972). Under Office of Communications, United Church of Christ v. FCC, ___ F.2d ___ (D.C. Cir. 1968); (Burger, J). Any administrative agency has the responsibility not to be a mere policeman, but to actively carry out the mandate of its statute. Both duties have been totally neglected by the staff, and the Licensing Board erred in sustaining the staff's objection to the inclusion of these matters as contentions, and to opening them up for litigation.

II. AN OPERATING LICENSE CANNOT BE ISSUED BEFORE
PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT

A. NRC Regulations Require that an EIS be part of the
Hearing Process and Precede the Initial Decision

An EIS is made a prerequisite to issuance of an operating License by Commission regulations, 10 CFR § 51.5 provides:

"(a) An environmental impact statement will be prepared and circulated prior to taking any of the following types of actions:

(b) Issuance of a full power or design capacity license to operate a nuclear power reactor pursuant to Part 50 of this chapter;"

In addition, the above mandatory language, an action under subsection (a) requires an EIS because of Section (b) lists actions which may need an EIS and subsection (d) lists insignificant actions not requiring an EIS. By inference, the present action, being neither a (b) or (d) action, is an (a) action.

The Environmental Report - Operating License Stage required to be prepared by the applicant pursuant to § 51.21 is not an EIS, clearly under NEPA, as it is prepared by the applicant and also under NRC regulations. NRC regulations require that an EIS be prepared by the Director of Nuclear Reactor Regulation as soon as practicable after receipt of the EROC (10 C.F.R. § 51.22). Here the EROL is still being assembled, and the pell-mell process of the last sixty days has not settled any questions.

The EIS must be complete at least in draft form before any hearing can commence and must be complete and put in evidence by NRC Staff during the proceedings. 10 CFR 51.52 provides:

(a) In any proceeding in which a draft environmental impact statement is prepared pursuant to this part, the draft environmental impact statement will be made available to the public at least fifteen (15) days prior to the time of any relevant hearing. At any such hearing, the position of the Commission's staff on matters covered by this part will not be presented until the final environmental impact statement is furnished to the Environmental Protection Agency and commenting agencies and made available to the public. Any other party to the proceeding may present its case on NEPA matters as well as on radiological health and safety matters prior to the end of the fifteen (15) day's period.

Additionally, it is the responsibility of the presiding officer at the hearing to decide NEPA issues, as provided in 10 CFR 51.51 (b) (2):

(2) In such a proceeding the presiding officer will decide those matters in controversy among the parties within the scope of NEPA and this part.

Clearly this responsibility cannot be meaningfully fulfilled if not based on the full NEPA record, as reflected in the EIS. See discussion in Section II, C, *infra*.

From the above, it is clear that The Commission regulations require that an EIS be part of the operating license proceedings, and that it exist in final form to provide a basis for The Board's Initial Decision.

The Staff has not have the benefit of coordination with the agencies of expertise, such as EPA and Fish & Wildlife, with whom it must consult prior to the DEIS preparation is made (CEQ Regulations, 40 C.F.R. § 1500.1 et. seq.). Also, to ensure that preliminary judgements do not disrupt the unprejudiced review of environmental inputs required by NEPA, and that the Staff review is comprehensive, the regulations prohibit the Staff from presenting evidence on any matter until the Staff has completed the DEIS and thereby apprised itself of the full impacts of the proposed licensing and has made that full understanding the basis of its judgement. Accordingly, consistent with the regulations and the view of the Staff expressed in requesting reconsideration of The Board's June 1, 1982 Special Prehearing Conference Order, in light of the present record, the testimony submitted by the Staff to date must be stricken, and resubmitted as appropriately amended and accompanied by the DEIS.

Additionally, the procedure described in the regulations discussed above has been recognized by the

practice of the Commission, and is a minimum required by NEPA itself, as reflected in various cases discussed below.

- B. The Commission has required preparation of an EIS in Conjunction with the Hearing Process; It is the Responsibility of The Board to Incorporate this Statement
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Cases before the Licensing Board or Appeal Board of The Commission reflect unanimous conformity with the requirements of the regulations that an EIS be prepared before an Initial Decision is made. Presumably because the procedure has been so uniformly followed, and is so essential to compliance with NEPA, the issues raised by deviating from it do not yet appear to have been raised. However, in cases discussing the extent of flexibility in setting hearing procedure and the scope of discretion afforded The Board, the requirement that an EIS precede the Initial Decision shows itself as unavoidable.

For example, in confirming its separation of health and safety issues (under the Atomic Energy Act) from environmental issues (under NEPA) in the receipt of evidence, The Board has noted "we have flexibility in our allocation of various issues to particular hearing sessions, and could hear an issue at any time after publication of the Staff's document treating that issue..." In re Pennsylvania Power and Light Co. (Susquehanna Steam Electric Station, Units 1 & 2), 11 NRC 906, 908 (1980) (emphasis supplied).

Similarly, it has been pointed out that the environmental reports are subject to review by The Board in an adjudicatory setting "in which all parties with a demonstrated interest may participate in evidentiary hearings. "In re New England Power Co.", 7 NRC 271 (1978). In other words, not only is it important that The Board have the benefit of Staff reports, but also that the public not be required to develop its own record from scratch.

Where early hearings have been held, they have been "appreciably in advance of the target date for the start of construction activities", have "not amount(ed) to a final disposition of any environmental question", and have been gauged to develop "evidence (that) might suggest that more data should be obtained on the diversions of certain threatened environmental harm; e.g., that additional investigation is called for to ascertain more precisely the effect of the facility's proposed cooling system upon the marine environment. And even in Douglas Point, the hearings were held only after a draft EIS has been prepared and circulated by the Staff. "In re Potomac Electric Power Co.", (Douglas Point N.G.S., Units 1 & 2), 1NRC 539, 547, and 549.

Not only would proceeding with the present hearing prevent the Staff from performing its mandatory duties and prevent the Decision of this Board from resting on an adequately developed record; also, the attempt to develop a

full evidentiary record in the hearings alone would usurp the powers and functions of the Staff.

The decision in In re New England Power Co., 7 NRC 271 (1978) illustrates this point. The opinion notes that the Commission has been empowered by statute to appoint Licensing Boards to conduct adjudicatory hearings and that these Boards have limited power. The Staff had independent responsibility for evaluating data and preparing draft and final impact statements. The Board has no role or authority in their preparation.

This same division of roles between the Board and Staff was described in Union of Concerned Scientists v. AEC, 499 F.2d 1069, 1077 (D.C. Cir. 1974). As stated by the Court, Licensing Board's "mandate is to review the sufficiency of the record and the adequacy of the analysis to support the necessary findings."

This discussion is consistent with the regulations regarding the Board's powers and duties, which also contemplate a division between the Staff's investigative duties and the Board's adjudicating role. See, e.g., 10 CFR §2.719(a).

From the regulations and cases, a clear picture of the applicable NEPA procedural guidelines arises. Before hearings commence, in connection with the definition of issue through review of contentions and otherwise, the Staff is to investigate environmental impacts and prepare a draft statement before the beginning of the hearings. This

statement forms a base of information, especially important to the public with its limited resources, which is further refined in the hearings dealing with specific contentions. During the course of these proceedings, dealing with presumably central issues, the Staff is able to refine its draft statement and introduce the final statement into evidence. Finally, based on both the EIS and the evidence adduced in the course of the proceedings, the Board is able to issue its decision on the contentions, including a review and any changes desirable in the Final Environmental Impact Statement.

C. NEPA Requires A Procedure In
Conformity with the Regulations

The procedure set out in the regulations is clear, and is clearly mandatory. However, even if the regulations were somehow read to have intended flexibility on these points, or indeed even if the regulations did not exist, that flexibility could not be applied to alter the procedural steps set out above without running afoul of the requirements of the Act itself. NEPA's requirement that environmental considerations be incorporated into the decision-making process in its earliest stages has been held repeatedly to require that at least a draft EIS be prepared before an initial decision be issued. NRC procedure particularly would have to comply with this requirement, since the Board's Initial Decision in fact has the effect of a final decision by the agency, bending possible appeals.

10 CFR §2.761.

Directly on point is Greene County Planning Board v. FPC, 455 F.2d 412 (2d Cir. 1977), cert. den. 409 U.S. 849. The Commission there had failed to prepare its own EIS regarding a transmission line, and argued that it was not necessary until after its decision. The Court rejected this argument and held that the Commission must issue its statement prior to any formal hearings. As stated by the Supreme Court long ago in _____, an agency may not violate its own rules.

The Court reviewed the language of NEPA, requiring a comprehensive integrated review of environmental impacts "at every distinctive and comprehensive stage of the [agency's] process." 455 F.2d at 420, quoting Calvert Cliffs' Coordinating Committee v. AEC, 449 F.2d 1109, 1119 (D.C. Cir. 1972). It was not enough, said the Court, that the Commission pass judgment on the impacts; it must actively review their consequences before making a decision. Delay would result, but this was preferable to discovery impacts "at a stage where corrective action may be so costly as to be impossible." 455 F.2d at 423. (Similarly, putting off the in-depth review of an environmental statement until after a decision that might permit construction that is scheduled to begin essentially simultaneously, would begin the expenditure of sums for a project that might later be shown unacceptable.)

For these reasons, the Court in Greene County held (455 F.2d at 422):

"we deem it essential that the Commission's staff should prepare a detailed statement before the Presiding Examiner issues his initial decision."

More recently, the rule was stated:

"If §102(2)(c) [of NEPA] applies [to an agency action], the Commission is under a mandatory obligation to file an EIS at the commencement of the action. Failure to comply with this absolute requirement would operate to invalidate any order issuing from the administrative proceeding." Mobil Oil Corp. v. FTC, 430 F.Supp. 855 (S.D.N.Y. 1977) (emphasis in original).

Because, under NEPA and 10 CFR §51.5(a), an EIS is required in an operating license proceeding, it is also necessary that it be prepared before or during hearings, and be final before an initial decision. The obligation to prepare a draft EIS before hearings, and use this as the base for the agency's decision is clear, and it is clear it cannot be tampered with to the extent of shifting the EIS preparation beyond the decision.

While the Board commendably moved quickly to insure timely consideration of environmental impacts in scheduling this early hearing, subsequent revelation that construction is not needed now, and failure of the staff to comply with NEPA renders present has to illadvised an unnecessary. (See Motion)

For these reasons, and relevant portions of the following discussion of certification, appellants urge that the Board should have stayed the proceedings until preparation of an EIS, and incorporate consideration of the environmental statement in the hearings and in its Initial Decision.

NEPA also precludes segmented decisions e.g., Overlook Alliance. The Commission's internal division of the PPD into construction and operating impacts is invalid if it causes segmentation, and if disposed of separately, will do so. Del-AWARE's repeated requests to the Commission, starting in June, 1981 and continuing through its Contentions herein, and its formal §2.206 Request, put the Commission on notice of the need to address these experts. They cannot be so segmented as now seems likely.

Since the publication of the DEIS, EPA has filed its comments, dated August 15, 1983. A copy is attached hereto as Exhibit "A". The EPA comments make it clear the DEIS is deficient in its failure to address these issues. It makes it clear that EPA has continuing concerns regarding the impacts of the diversion on the Delaware River, in terms of salinity and water quality, and the impacts on the receiving streams through the diversion. A specific reference is made to the possibility of avoiding impacts on the East Branch of the Perkiomen Creek of increasing the flow, by utilizing alternatives which might be adequate for one unit at Limerick.

The Board also refused to consider this aspect of the issue, on the grounds that intervenors had not adequately demonstrated new evidence that one unit could be served from the Schuylkill River. The record in terms of the motions and exhibits, especially Del-AWARE's response to the Operating Licensing Board's request for additional

information, dated November 16, 1982, and the subsequent filings in March, 1983 make it clear that in fact alternatives were brought forth which would suffice for only one unit at Limerick. Subsequent testimony of DER and DRBC witnesses at Pennsylvania Public Utility Commission hearings in May, 1983, after the Board had decided the case, make it clear that intervenors had raised an issue which conform to the requirements of the Licensing Board. (Copies of excerpts of prepared testimony of Robert Goodell, Chief Engineer of DRBC, and Timothy Weston, alternate delegate of Pennsylvania of DRBC attached hereto as Exhibits "B" and "C".)

Intervenors realize that in so providing documents to this Board, they may be violating internal operating rules of the Commission. However, it is respectfully submitted that intervenors have approached the Board and the Commission in every other fashion, and the internal procedures of the Commission cannot override the duty to deal with information that should be considered by the Commission prior to making a decision. Where the rules create a situation where decision are made and subjected to review without an opportunity for full consideration, the agency procedures are at fault, not the intervenors, and the agency procedures must be subjected to further scrutiny to provide an appropriate forum in which the agency can discharge its responsibility.

The EPA comments take on further significance when it is known that the DRBC approved this diversion despite the concerns of its Commissioners that an EIS be performed on the effects, because of this Commission's undertaking via letter dated December 16, 1980 to the DRBC and EPA, committing this Commission to considering the environmental effects of "facilities required for [Limerick's] operation" as part of its EIS. A copy of this letter is attached hereto as Exhibit "D".

EPA withdrawal of its objections to DRBC approval was based in part on this Commission's commitment (see Exhibit "E"). This matter now becomes significant in light of EPA's conclusion that this Commission has not adequately dealt with the subject. In the circumstances, the Board's action in giving credence to the DRBC decision must be vacated.

In short, the Board conclusion that it is precluded from further considering the effects of diversion from the Delaware River by the DRBC docket decision is precisely a catch 22 in the literal sense. DRBC premised its docket decision on the assumption that this Commission would make the evaluations; the Board decision had this Commission refusing to do so on the ground that the DRBC made the decision. EPA's comments on a DEIS are critical in illustrating that this is not merely a problem of form, but a problem of serious substance.

The failure of this Commission to carry out the mission assumed by the Commission in its December 16, 1980 commitment, and confirmed in its January 5, 1981 letter to PECO, as illustrated in the DEIS (carrying out no new investigation, but merely endorsing DRBC action) is not only a refusal to carry out a duty, it involves this Commission in failing and refusing to recognize significant environmental impacts which have been identified by the responsible agency.

First, DRBC itself has now (January, 1983 reconfirmed in July, 1983) recognized that the water resources of the Delaware River are inadequate to prevent excessive salinity, and consequent adverse effects both on the public water supply of the City of Camden, New Jersey, and on the oyster population in the Delaware estuary, as a result of the Limerick diversion. While this is not stated in so many words, it is stated that the deficit in the present ability of the basin to meet appropriate salinity objectives (now deferred to the year 2000 because of inability to meet them) is approximately equal to the proposed Limerick diversion. (See position paper of DRBC staff July 1, 1983, Exhibit "F".) As a result, the DRBC is planning to build or modify four new reservoir in order to attempt to provide adequate water to meet salinity objectives at and after the year 2000. There is no hope of meeting them in the meantime. While these new reservoirs, in the aggregate, will enhance low flow by an amount more than equal to the Point Pleasant

diversion, no recognition has been accorded to the Point Pleasant diversion as causing any one of these modifications, or a portion of all of them.

Under these circumstances, the refusal of the Licensing Board to admit these issues into the proceedings, and to deal with them in its partial initial decision, which purports to dispose of the water issues altogether, is clearly erroneous, contrary to the statute and the National Environmental Policy Act, which this Commission has an obligation to sustain, and must be overturned.

III. THE BOARD ACTED IMPROPERLY IN PROCEEDING TO
ADJUDICATE THE LOCAL EFFECTS OF THE DIVERSION AT
POINT PLEASANT PRIOR TO THE PREPARATION OF A FINAL
ENVIRONMENTAL STATEMENT AND COMPLIANCE WITH OTHER
LAWS

When the Board decided to hold early hearings on the water issues, it did not state they would be final hearings on the issue. No indication of this intent was given by the Board until it actually issued its RED. In acting preemptorily, the Board violated NEPA, the Fish & Wildlife Coordination Act, and the environmental laws.

At the time that the Commission started the hearings in September, 1982, the staff had barely had sixty days in which to begin to understand the effects of the diversion on the local scene. The staff, consequently, had to seek leave to modify its testimony as the hearings progressed. Moreover, the staff identified areas of concern relating to noise, which it said might adversely affect a

National Historic Landmark. Finally, no opportunity was provided for public critique of the staff's comments, nor was a final environmental impact statement filed, providing for appropriate reviews within the agency and the decision by the responsible official as to the proposed conclusions of the staff's review. Instead, the matter was taken to hearing, and the staff came forward with final conclusions, not supported by any environmental impacts statement. Similarly, the Board reached its conclusions without support of any environmental impact statement. The comments of the Fish & Wildlife Service, for example, were not obtained or considered, as required by the Fish & Wildlife Coordination Act, prior to the staff reaching conclusions and giving testimony. On the contrary, the Fish & Wildlife Service was brought into the proceedings by the efforts of the intervenors. Instead of seeking the advice of the Fish & Wildlife Service and the Pennsylvania Fish Commission, as required by the Fish and Wildlife Coordination Act, 16 U.S.C. §470 et seq., the staff actively opposed their intervention, officially complained to the Fish and Wildlife Service regarding their having provided their expert opinion, required NEPA, the Fish & Wildlife Coordination Act, and the rules of this Commission. A Freedom of Information Act request to obtain documentation as to the staff's complaints has resulted in no response to date. A copy of the Freedom of Information Act request is attached hereto as Exhibit "G".

Nor was there any compliance with the National Historic Preservation Act of 1966, 16 U.S. §670 et seq. In other words, what transpired was, contrary to NEPA, Fish and Wildlife Coordination Act, NHPA and the Atomic Energy Act, a failure effort by the staff to comply with statutes, to causing no opportunity for public comments, and to have the issue decided and determined prior to compliance with NEPA.

In these circumstances, it is no wonder that the Board reached an unjustified and erroneous legal standard that the significant question before was whether the diversion would have a significant on two species of fish in the Delaware River. Read carefully, the Licensing Board's findings make it clear that the Board did not conclude that intake would not have a significant effect on fish at the intake location, nor an effect on the species (shad) in the Delaware River.

There is no warrant for the staff and the Licensing Board's focus the issue as significant effect on the species in the river. On the contrary, NEPA and the Fish and Wildlife Coordination Act are intended to identify and protect against impacts to the fish population. This is not to say that no impacts on fish are allowed, but only that the Board failed to properly identify the issue, so that it could appropriately consider all actions and alternatives.

Indeed, the Board relied on its finding of no significant impact on the species in the river as one of the alternative grounds for rejecting the intervenors' efforts

to persuade the Board to consider alternatives to the diversion. (Order of _____, 1983, at p. ____.) In effect, the Board stated that there was no need to consider alternatives because there were no significant effects of the diversion. This completely misstates the significance test under NEPA, which does not require that there be a finding of significant effect on the species in the river in order to be concerned. For example, the cutting of trees in one national forest which might destroy that forest is significant, and requires an EIS without regard to whether there are many other such forests contiguous or substantially contiguous. Similarly, the destruction of one neighborhood is significant, and requires an EIS, without regard to whether there are other neighborhoods in the same city. In addition, the destruction of a school of fish can be significant without regard of the loss of the species.

Thus, the Board's finding was on an erroneous legal basis, and could not support its refusal to consider alternatives, nor sustain its permission for the project to go ahead.

Moreover, the Board's finding was clearly polluted by its unwillingness to consider the effects of the diversion on the river as a whole and on the Perkiomen Creek, there by ignoring the effects, in coming to the conclusion that it need not consider alternatives because the effects did not warrant it.

IV. THE BOARD ERRED IN REFUSING TO CONSIDER THE
IMPACTS OF THE DIVERSION ON BUCKS COUNTY

In its SPCO on June 1, 1982, the Board held that it would not consider the effects of the Neshaminy Water Project as attributable to Limerick, because it accepted the affidavit of the Director of the NWRA (the sponsor) that that project would be built anyway. In refusing to allow the issue to be litigated, and that affidavit tested in hearings, with the evidence which was proffered by intervenors, the Board clearly erred.

In fact, the position advocated by intervenors has since by amply sustained by the financial analysis of the project performed for Bucks County Commissioners dated February, 1983, in which the consultants told the Bucks County Commissioners that they would not be able to recommend proceeding with the project were it not for Philadelphia Electric's financial commitment. (See Exhibit "G")

V. THE BOARD ERRED IN FAILING TO MAKE FINDINGS AND TO
TAKE ACTIONS CONSISTENT WITH SECTION 110(f) OF THE
NATIONAL HISTORIC PRESERVATION ACT

The Board properly recognized in its June 1, 1982 SPCO that the effects of the pumping station at the Delaware River at Point Pleasant on Historical Resources was a relevant matter for it to consider. (SPCO, at ____)

However, at its July 14, 1982 Order on reconsideration, it attempted a fatal and artificial distinction, which it

admitted might be such, into construction and operating impacts.

The futility of this distinction became clear at the hearings when the staff itself testified that the transformers proposed as part of the pump station could have an adverse effect on the National Historic Landmark, the Delaware Canal. The solution proposed was construction of a wall, which PECO has agreed to build if operating tests show a need. (Comments on DEIS, August 15, 1983.) The Board refused to consider the effects that a twenty-five foot high wall sixty feet from the edge of a narrow National Historic Landmark, the Delaware Canal, and from the water and tow path which were considered a pristine preservation sufficient to designated a National Historic Landmark, would have on the landmark. (TR, _____)

Thus, in another apparent gap in this Commission procedures, no forum is presented in which to consider the effect of the project on a National Historic Landmark.

Section 110(f) of the National Historic Preservation Act of 1966, 16 U.S.C. § _____ et seq., was enacted in December, 1980, after finalization of the pump station design, but before its approval by this Commission, in an effort to protect National Historic Landmarks. It provides that any action, including a permit issuance, by a federal agency that adversely effects a National Historic Landmark, can not be taken unless an agency undertakes all possible planning and action to minimize harm to the landmark. No

such action has been taken, and no compliance has been effected with this section by the Board's ruling. No findings have been made that the proposed actions will minimize harm to the Landmark. This is clear error and must result in a reversal of the Board's decision.

VI. ENDANGERED SPECIES ACT

The testimony before the Licensing Board indicated that shortnose sturgeon had not been found in the area of the intake. It also indicated that no sampling had been done during the period when shortnose sturgeon would be expected to be in the area of the intake. Again, the findings, as with shad, were to the effect that the intake would not likely Affect the existence of the species in the Delaware River. This is not the degree of protection afforded by the Endangered Species Act. That Act covers any undertaking which may affect the members of such a species. Shortnose sturgeon is such a member, and the Board did not, and could not on the evidence, find that they would be no effect on the sturgeon. The opinion of the National Marine Biological Service, stated that there was no basis for concluding that there would be an effect, but also recognized that the absence of study made it impossible to reach any conclusion. In these circumstances, the Board clearly erred, and its decision should be reversed.

VII. THE FAILURE TO CONSIDER ALTERNATIVES, AND THE REFUSAL TO CONSIDER THE DECISION OF THE PENNSYLVANIA SUPREME COURT IN HOLDING THAT CONSTRUCTION OF UNIT ONE AT THE PRESENT TIME IS NOT FEASIBLE

This Commission must be aware of the sea change that is taking place regarding the completion of various nuclear plants around the country. While the Pennsylvania PUC decision, as sustained by the Pennsylvania Supreme Court, does not totally rule out the completion of Limerick Unit 2, and while PECO is still making desperate efforts to obtain "understandings" from the Pennsylvania PUC as to the date and size of the inclusion of Unit 1 in the rate base as a spring board for financing construction of Unit 2, the Pennsylvania PUC has not accepted this strategy as yet, and even if it did, it would be subject to judicial challenge.

This Commission, intervenors argue, must consider the need for power, the financial impacts of the project, and the benefit factors involved, prior to reaching an appropriate decision, in light of the dramatic change in circumstance in taking place around the country. Many nuclear projects have been cancelled in just the last 12 months, and as this Commission undoubtedly is aware, substantial portions of the capacity of projects already completed are going begging for buyers, in the very region that Philadelphia Electric intends to serve. This includes a substantial portion of the Berwick Station of Pennsylvania Power and Light, and the Salem Generating Station of New Jersey Power and Light. The Pennsylvania PUC is presently

concluding its proceedings as to whether to disallow inclusion of portions of Berwick in the rate base of PP&L as a result of excessive capacity, and the New Jersey PUC and the Pennsylvania PUC are currently at loggerheads over whether Pennsylvania utilities should be required to purchase a portion of the Salem station. In these circumstances, it folly for this Commission to ignore the question of need for the facility.

Collectively, the Board and the staff have refused to do so. In responding to appellants Motion of September 20, 1982, which incredibly, was the first notice the Board had of the PUC decision (Motion passed May 19, 1983, Final Decision issued August 27, 1982), the Board rejected the issue. Intervenors cannot be blamed for not knowing. In its Order of June, 1983 the Board refused to consider the decision of the Pennsylvania Supreme Court. In a staff letter dated June ___, 1983, the staff, in refusing to do so, uttered the following:

"It is the practice of the staff to the review the applications submitted to it".
See Exhibits "G" and "H".

Again, subsequent to the Board's conclusions, the information became available which would undoubtedly become available in a timely fashion to the Board had it waited for the EIS process before deposing of these contentions. On July 20, 1983, responding to a requested of the Pennsylvania Public Utility Commission, the Fish and Wildlife Service provided the PUC with its opinion, which undoubtedly would

have been provided to the NRC, had the NRC staff ever responded to the Fish and Wildlife proffer of information to be included in the DEIS. (Exhibit "I") In July, 1982, the Fish and Wildlife Service had volunteered its assistance in the preparation of the DEIS. (Exhibit "J") The July 20, 1983 letter to the Pennsylvania PUC informed the PUC that Blue Marsh Reservoir on the Schuylkill River is fully capable of providing for one unit at Limerick, and can do so without serious environmental consequences. Modifications to the reservoir are possible which would eliminate any adverse consequences, and would actually assist in the management of the Schuylkill River.

Thus, the future of Unit 2 at Limerick and alternatives are clearly intertwined. (Fish & Wildlife Service also notes that by a much more substantial modification, Blue Marsh could be expanded to provide two units at Limerick.)

Refusal of the Board to consider these late developments, despite the Applicant's insistence that they were premature until decided by the Pennsylvania Supreme Court, and indeed the Applicant is contending that they are still premature, makes a mockery of the administrative process.

CONCLUSION

From 1970-1983, the public interest had been defeated by adroit timing of action by agencies, either

fortuitously or intentionally. The use of the Delaware River water for Limerick was approved on the basis that there was adequate water in the Delaware River, and that Limerick has a positive benefits cost ratio, and was needed. By 1980 it was becoming clear that neither of these facts were true, but no recognition was given to either of them. Instead, this Commission and the DRBC agreed that the DRBC would give tentative approval to the use of Delaware River water for Limerick, and that a decision by the Pennsylvania PUC as to the need for Limerick and by this Commission as to the affects on the water quality of the Delaware River would be made later. These conditions was thus included in the DRBC docket.

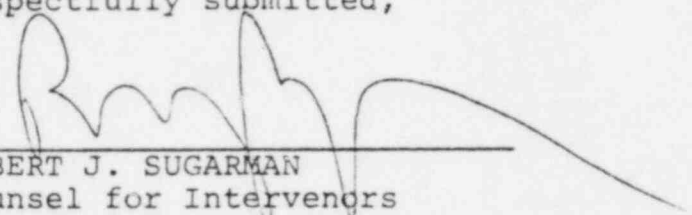
Subsequently, the PUC decided that Limerick Unit 2 is not only not needed, but not feasible. Moreover, the DRBC has now itself admitted that there is inadequate water in the Delaware River. However, this Commission, by action of the Licensing Board, is sticking its head in the sand, and refusing to recognize these changes in facts on the grounds that previous decisions were final. Such an administrative shell game is a perversion of the administrative process.

Moreover, similar timing and scheduling decisions by the Licensing Board defeat the purpose of NEPA, offer a crabbed interpretation, and more of this Commission's duty to affirmatively in to these matters made part of its

mission by statute, contrary to Chief Justice Burger's oft repeated dictum in United Church of Christ.

The decision of the Licensing Board should be reversed, and this Board should take whatever action is necessary to insure that this Commission requires that Limerick unit 1 be require to utilize alternatives other than the Delaware River diversion, and that the Applicant be require to make immediate application to the DRBC for the use of Blue Marsh Reservoir water.

Respectfully submitted,



ROBERT J. SUGARMAN
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Of Counsel

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August 23, 1983
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CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing Appellants' Brief in Support of Exceptions from Partial Initial Decision by mailing a copy of the same to the following persons this 23rd day of August, 1983.

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Washington, D.C. 20555

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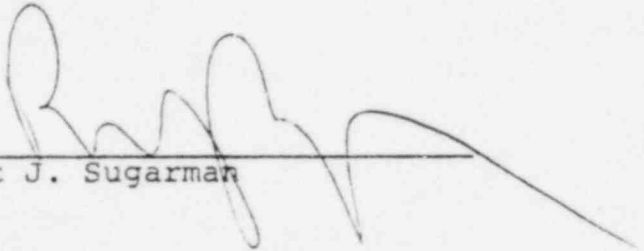
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Dated: August 23, 1983



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA PENNSYLVANIA 19106

AUG 10 1983

Dr. Rajender Auluck, P.E., Project Manager
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Auluck:

EPA has completed its review of the draft EIS for operation of the Limerick Generating Station, as required under Section 309 of the Clean Air Act. In general, the document is acceptable with certain exceptions enumerated in the attached technical comments. As a result of the review, the draft EIS is rated ER-2, which means that the environmental reservations are related to insufficient information. The attached sheet describes the rating system used by EPA and is enclosed for your information.

In late 1980 and early 1981, the EPA EIS review staff met with the DRBC and PaDER several times to clarify environmental issues related to the Neshaminy Creek Watershed Plan and Water Supply Plan. The issues discussed had been raised in a letter to DRBC, dated September 26, 1980, and supplemented in subsequent meetings. The issues included analysis of flows, population and water use projections, water conservation controls, and the relationship of the Philadelphia Electric Company needs (described in Docket No. 79-52-CP) as it relates to components of the NWRA watershed and water supply plans. These meetings resolved our technical concerns regarding the NWRA portion of the diversion proposal and resulted in our conclusion that the potential benefits to be derived from the diversion, as claimed in the various Dockets, far outweighed any potential adverse impacts. This is the position EPA took in a letter dated February 17, 1981 to Governor Tribbet of Delaware, who was then the U.S. Commissioner of DRBC.

The majority of the following comments are concerned with radiation and cooling water with regard to its sources and receiving streams. In some cases the radiation information is incompletely addressed while in other places it is presented in a way that is confusing to the reader. The major deficiencies regarding radiation are: a) treatment of EPA standards, b) a lack of information on postulated accidents, and c) a lack of information on decommissioning.

EXHIBIT A

Technical Comments

Radiation Concerns:

A most important concern is the treatment of the EPA standards for the uranium fuel cycle given in 40 CFR 190. These standards are fleetingly addressed on pages 5-38 and 5-48, 49. The standards are incompletely described and are addressed only by the vague statement that "under normal operations the Limerick facility is capable of operating within these standards." This statement does not state whether or not the plant actually will operate within the standards, and more importantly only a part of the standard is referenced by the DEIS. Attached is a copy of 40 CFR 190 for your information. In a careful study of the DEIS, we have found that information is supplied on pages 5-64 and D9-D11 which may be compared to the EPA standard, but the information is not presented in an understandable format and there is some question as to whether the standard for release of krypton-85 will be met. The EPA standards should be directly and completely addressed in the EIS in tabular form so that projected releases may be directly compared to the standard. The standard is applicable only to normal operations.

In addition, there is a lack of information on postulated accidents and on the radwaste system. On pages 5-61 it is stated that NRC's review of the utility's probabilistic risk assessment has not yet been completed and "will be factored into the NRC staff's analysis . . . to fulfill the requirement of this section of the DES." The radwaste issues are to be addressed in Chapter 11 of the SER. Both of these issues are an integral part of the environmental impacts of the plant and should be considered as a part of the NEPA process. No final EIS should be issued before these issues are reviewed by EPA and supplemental comments provided to NRC.

As a final note on the radiological portion of this review, the impacts of decommissioning are only briefly mentioned in passing. At least a general order of magnitude of these impacts should be discussed, though specific numerical estimates of the impacts are probably not yet available.

Hydrology and Cooling Water:

Information presented in the document regarding hydrology is in agreement with information available to the EPA technical staff. However, some serious questions have been raised over the cooling water sources and uses.

Questions are raised concerning withdrawal flows presented in Table 4.1 and Section 4.2.4. Page 4-10 indicates a maximum withdrawal rate of 95 MGD from the Delaware River. Of this, a maximum of 46 MGD will be diverted to Limerick. However, Table 4.1 shows a maximum flow of 37 MGD from the Delaware/Perkiomen. This apparent inconsistency should be explained.

Page 4-12 indicates a maximum withdrawal rate of 41.9 MGD from Perkiomen is expected. However, this does not match with the maximum flow of 46 MGD diverted to Limerick, as stated on page 4-10, nor does it match the flows in Table 4.1 for the Perkiomen. Again the apparent inconsistency should be explained.

These inconsistencies may be serious, with implications reaching from operation of the Point Pleasant diversions all the way to the range of possible effects upon the final receiving stream. These could impact the Bradshaw reservoir, the East Branch of the Perkiomen Creek, the Perkiomen Creek, the Schuylkill at the confluence with the Perkiomen, and downstream.

Section 4.2.4 should detail the current conditions of those streams to receive diversion water more thoroughly than is done. For example, virtually nothing is included regarding the conditions of the riparian habitat or the flood plain, and in chapter 5 no mention is made of the effects under extreme conditions, e.g., high flows of short duration. We agree that diverted water will result in negligible effects most of the time and furthermore will probably have beneficial effects ecologically. However, extremes should be thoroughly explained. In addition, very little is mentioned regarding the effects of the environmental ramifications of flows 4 to 25 times normal. You have included information that flows are below the highest flows and that they are well within the erosion limits, but disclosure should go beyond merely the water quality conditions. The answers are probably available and deserve inclusion, if only by reference.

In addition, no mention is made of the effects the Pennsylvania Public Utility Commission decision regarding unit two. If only one unit is ever operated, what are the implications for the cooling water budget both from the Point Pleasant diversion and the Schuylkill? Since this possibility has been disregarded, we have no way of estimating any aquatic impacts that may result from differing operational configurations. If only one unit is ever brought on-line, alternative sources of cooling water may be available. In this case, diversion of water into the East Branch of the Perkiomen may be unnecessary.

Part of the operational plans mentioned in the document are concerned with the use of releases from the yet to be constructed Merrill Creek facility. Admittedly, all the ramifications of this are unknown, but it seems apparent that releases from that facility will seldom be needed. However, if that facility is necessary for the successful operation of the LGS then what contingency has been planned in the event that the Merrill Creek facility is precluded? This as well as other impoundments appears to be crucial to future water quality in the Delaware.

Recent information indicates that DRBC is continuing to update the modeling of the Delaware, especially with regard to the salinity criteria. As we understand it, the latest salinity objective for the year 2000 is unachievable under current operational modes of existing and planned impoundments and diversions. Apparently a need exists to adjust the operational configuration of these projects to achieve the salinity objective. Aside from the fact that DRBC has a plethora of alternatives to consider and quite a few years to develop and examine them, still the demands by Limerick are certainly a part of the Point Pleasant diversion and certain to be a concern in the deliberations over the salinity issue. Therefore, the salinity issue and operation of the Limerick plant are related and the basin's overall water budget into the future may effect the operation of the Limerick plant. Sections 5.3 or 5.3.2.3 should include discussions regarding salinity and the EIS should include information on the impacts expected from the various operational configurations, both for the LGS as well as for the dams and diversions.

An apparent inconsistency exists in statements under Section 4.3.2.1 (p. 4-3) and 5.3.2.2 (p. 5-3). In the first case it is stated that no changes in the overall scheme for water use has occurred while on page 5-3 it is stated that several changes in the design have taken place. The reviewers assume that these changes have been made to accommodate water quality implications, however, no information is presented to tell why such changes were necessary and why such drastic efforts were needed for what appear to be incremental improvements. On the other hand, perhaps these design efforts have been made for larger improvements than are expressed. If this is so, then the document should discuss design changes discarded and why.

Another inconsistency exists regarding benefits to accrue from the Point Pleasant diversion. In Docket No. D-65-76CP (8), DRBC has eliminated dilution and augmentation as Point Pleasant diversion benefits for the Neshaminy, but the draft EIS claims such benefits for the East Branch Perkiomen. This appears to be inconsistent because it is a claim of convenience in spite of the fact that apparently dilution is the easiest means for improving the lower portion of the East Branch.

In Section 5.3.2.3, operation of the diversion and its environmental effects are discussed. It is understood that once the diversion of water to Limerick is begun the flows will be maintained so that extremes in fluctuation of water levels in the streams used for diversion will be avoided. However, no mention is made of how the diversion will be operated so that flash floods resulting from short duration/high intensity storms will not be exacerbated. There may be no cause for concern here, but some attention should be paid to the possibility, especially in light of the lack of riparian habitat along the streams of the area. In other words, much of the flood plain in the area has been changed so that it is now dedicated to agriculture or to activities other than flood way.

Air Concerns:

Under air impacts on page 5-24, the emissions are estimated to be "less than EPA de minimus levels" for certain pollutants. These de minimus levels are probably those used for PSD purposes. No information is given on the actual off-site ambient concentrations that will result. While the low emissions will most likely result in very small impacts, this does not justify the complete lack of any numerical data to backup this assertion. At a minimum, annual and maximum 24-hour emissions should be given. A simple model could then be run to estimate off-site concentrations. If these are truly as small, this will reinforce the conclusion that the impacts are too small to be significant.

Finally, on page 5-15, first paragraph, the last sentence states that "Actions to mitigate these potential impacts (from cooling tower chlorination) should be considered . . .". This statement constitutes a recommendation to the utility and is out of place in an EIS. It would be more appropriate to discuss what will be done, what are the alternatives and what mitigative actions will be implemented.

Other Concerns:

The following are some minor points and are offered for your consideration and information.

1) On page 4-37 mention is made of the possibility of the presence of eels in the Delaware. This is very likely, especially in light of the fact that a small eel fishery exists in the Port Jervis area, far upstream of the diversion intake.

2) The document contains some very assured statements regarding the ultimate improvement in quality of the streams receiving diversion water. However, monitoring in conjunction with operation of the diversion should be carried out for all parameters contained in the draft EIS as well as for the fish community. A good start has been made, as described in Section 4, of the trophic levels in all the streams. This should be expanded and continued as the diversion is completed and placed into operation.

3) Section 5.3.2.3 describes the nonthermal water quality anticipated for the Bradshaw facility and the Delaware. A statement is made that the reservoir will act as both a sediment controlling facility as well as a phosphorous sink. However, no mention is made regarding the nonsettleable fraction which will pass through the reservoir and may negate any phosphorous control claimed as a benefit of the reservoir. Perhaps some reassessments are in order if the modelling for receiving stream water quality has not included this source of phosphorous. In addition, we failed to see any statements covering retention time in the Bradshaw facility. Information from other sources indicates that sediment control is not achieved with flows greater than 10% of total capacity flow through per day. However, this is an optimum figure that is adjusted on a case-by-case basis. In any event, the claims made by the NRC for sediment control using the Bradshaw facility should be substantiated statistically in the final EIS.

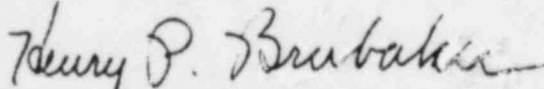
4) The next-to-last paragraph on page 5-25 states that "... induced shock will adversely affect biota along the Limerick Transmission corridor." Perhaps this is a typographical error because the remainder of the paragraph describes just the opposite. However, if this is not an error, then this section needs to be rewritten.

With regard to the cooling water discussions, the document is inconsistent in its presentation of the water budget and the needs. Major deficiencies in the water area of concern are: a) cooling water budget inconsistencies, b) the range of cooling water needs for differing operating configurations, c) aquatic impacts of flow extremes in diversion and receiving streams that may occur over short time spans, and d) dilution for water quality improvement in the lower portion of the East Branch Perkiomen Creek. These are the two major areas addressed in the comments and are followed by some air pollution concerns and other minor points.

We appreciate the opportunity to review the document and your staff's cooperation. If any points require further discussion or clarification, please contact Mr. Robert Davis of the EIS Review Team. He can be reached on 215-597-4388.

Thank you.

Sincerely,



Henry P. Brubaker
Chief, Analysis and Services Section

Enclosure(s)

Question and Answer Testimony of the DRBC
on the Pennsylvania PUC Hearing
Concerning the Philadelphia Nuclear Power
Station at Limerick, Pa.

By Robert L. Goodell
Chief Engineer
Delaware River Basin Commission

Question 1.--What agency is responsible for water management in the Delaware River Basin, including the Schuylkill River Basin?

Answer:-- The Delaware River Basin Commission (DRBC) is the responsible agency. Sections 3.3 and 3.8 of the Delaware River Basin Compact (P.L. 87-328) pertain as follows:

Section 3.3 Allocation, Diversions and Releases. The commission shall have the power from time to time as need appears, in accordance with the doctrine of equitable apportionment, to allocate the waters of the basin to and among the states signatory to this compact and to and among their respective political subdivisions, and to impose conditions, obligations and release requirements related thereto...

Section 3.8 Referral and Review. No project having a substantial effect on the water resources of the basin shall hereafter be undertaken by any person, corporation or governmental authority unless it shall have been first submitted to and approved by the commission, subject to the provisions of Sections 3.3 and 3.5. The commission shall approve a project whenever it finds and determines that such project would not substantially impair or conflict with the comprehensive plan and may modify and approve as modified, or may disapprove any such project whenever it finds and determines that the project would substantially impair or conflict with such plan...

Manager of 3 Basin
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Question 7.--Mr. Phillippe, in his testimony, has suggested the use of the Blue Marsh Reservoir for the source of water supply for the Limerick plant.

How does DRBC react to such a proposal?

Answer:-- The Blue Marsh Reservoir, constructed by the Corps of Engineers and completed in 1979, is a multi-purpose project for flood control, water supply, low-flow augmentation for water quality control and for recreation. It is located on the Tulpehocken Creek near Reading, Pennsylvania. The DRBC has contracted for and purchased 8,000 acre-feet of water supply storage capacity in the Blue Marsh facility.

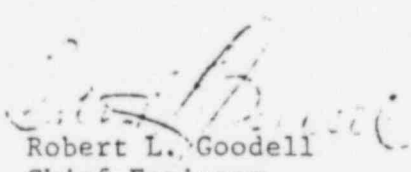
When the Limerick plant was first discussed with DRBC in the late 1960s, the concept of going to the Delaware River for water supply was not at first considered. It was believed that it might be possible to use water originating within the Schuylkill River Basin to meet this need. By 1970, however, the then current allocations of Schuylkill River water together with known future demands and limitations on possible reservoir construction in the Schuylkill Basin, resulted in a determination that importation of Delaware water was the only practical solution. The Schuylkill River was in dire need of storage to augment its low flows, both for the benefit of growing municipal and industrial demands within the watershed and for quality improvement. For these reasons, the DRBC felt it would be imprudent to sell the full yield of the Blue Marsh project to a single utility which would, in turn, use it consumptively. The alternative which was endorsed was to make Blue Marsh water available to municipal and industrial customers for whom high percentage return flows could be expected, which, in turn, would help carry the Schuylkill River background dissolved solids from the watershed. This water, reaching the Delaware River at Philadelphia, could serve also for salinity control in the Delaware estuary. It is clear that the storage allocated to water supply in the Blue Marsh project would not be adequate to support two units at Limerick under drought conditions and would be marginally adequate to support one unit, if essentially the entire water supply capacity in Blue Marsh were dedicated to that purpose. To do so would, in effect, preclude future capability of meeting the following needs:

- (1) increasing water supply needs of the Western Berks Water Authority, now under contract with DRBC. The Authority withdraws from the Tulpehocken Creek just downstream of the Blue Marsh Dam and releases from the reservoir are made to supply the Authority's withdrawal needs. The Authority's projected average needs increase from 4.8 cfs (actual use) in 1982 to 17.6 cfs in 2010.
- (2) releases to meet other withdrawal needs in the project area and to meet municipal and industrial water demands in the Lower Schuylkill Basin.

- (3) replacement of consumptive water uses in the Schuylkill Basin and throughout the entire Delaware River Basin during critical periods in order to meet minimum flow objectives established for the tidal Delaware River and control salinity in the Delaware estuary.
- (4) provide adequate flow augmentation in the Lower Schuylkill River for water quality enhancement in light of the significant number of industrial and municipal waste dischargers between Limerick and the Fairmount Dam.

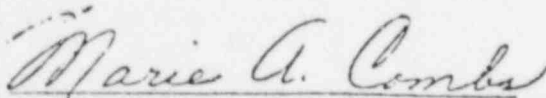
Blue March Reservoir is the only existing water supply storage capacity available to DRBC within the Schuylkill Basin and no others are presently planned.

The response to questions 1 through 7 above hereby constitutes the Delaware River Basin Commission staff comments on the Pennsylvania PUC hearing re the Philadelphia Electric Project at Limerick, Pennsylvania, as prepared by me.


Robert L. Goodell
Chief Engineer

Date: 4/26/83

Subscribed and sworn to before me
this 26th day of April, 1983.



Notary Public of New Jersey

My Commission Expires November 18, 1985.