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June 10, 1985

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Mr. Samuel J. Chilk
Secretary
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

In the Matter of
Philadelphia Electric Company
(Limerick Generating Station, Unit 1)
Docket No. 50-3520L

Dear Mr. Chilk:

Enclosed is another copy of a Notice of Commission Action transmitted by my letter of June 6, 1985. Some copies of the enclosure may have been incorrectly reproduced.

Sincerely,



for, Troy B. Conner, Jr.
Counsel for the Applicant

TBC/dlf
Enclosure
cc: Service List

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DELAWARE RIVER BASIN COMMISSION
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RELATED CORRESPONDENCE

DOCKETED
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Project Review

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NOTICE OF COMMISSION ACTION

OFFICE OF SECRETARY
DOCKET
Date: 6-3-85

Docket No. D-69-210 CP (Final) (Revis

Project Sponsor: Philadelphia Electric Company

2301 Market Street

Philadelphia, Pennsylvania 19101

Project Description:

Temporary Modification

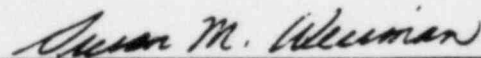
Referred by: _____

Action by Commission:

Included in the Commission's Comprehensive Plan for the Delaware River Basin and approved pursuant to Section 3.8 of the Delaware River Basin Compact. See attached docket for terms and conditions.

Explanatory Note:

This action has been taken by the Commission in accordance with its responsibilities under Sections 3.8, 11.1 and 11.2 of the Delaware River Basin Compact. The Commission maintains a comprehensive water resources plan for the Delaware River Basin and reviews water resources projects proposed by other public and private agencies. Review of projects enables the Commission to prevent conflicts among water users and to protect the integrity of the Comprehensive Plan.



Susan M. Weisman, Secretary

enc.

cc: R. Timothy Weston; All interested parties

DOCKET NO. D-69-210 CP (FINAL)(REVISED)

DELAWARE RIVER BASIN COMMISSION

Philadelphia Electric Company
Limerick Electric Generating Station
Limerick Township, Montgomery County, Pennsylvania

PROCEEDINGS

The Philadelphia Electric Company (PECO) applied, on March 21, 1985, for a temporary modification of Docket D-69-210 CP (Final). The application was amended with a submission of supplemental information on April 24, 1985.

The application was reviewed for temporary revision of the project in the Comprehensive Plan and approval of these temporary changes under Section 3.8 of the Delaware River Basin Compact. A public hearing on this application by PECO was held by the DRBC on May 7, 1985. The hearing record remained open until 5:00 p.m. May 14, 1985. Sixty-one comments were received and entered into the hearing record on this application.

DESCRIPTION

Purpose.-- The purpose of this application is to obtain temporary relief, through December 31, 1985, from two existing docket limitations and thereby increase the frequency that water may be withdrawn from the Schuylkill River for evaporation at Limerick Unit No. 1. The two existing limitations are: (1) PECO may not withdraw water from the Schuylkill River for evaporative use at their Limerick Station when the temperature rises above 59° F and (2) water for evaporative use may not be withdrawn from the Schuylkill River when the flow at the Pottstown gage (not augmented by releases from Commission sponsored reservoir storage) falls below 530 cfs for one Limerick unit in operation. They requested temporary substitution of DO monitoring in place of temperature restriction in original docket. The applicant also has requested, as necessary, release of varying amounts of water not exceeding 32.5 cfs, from water supply storage; and that the constraint contained in said docket, excluding consideration of releases from Commission-sponsored storage in counting flow at Pottstown, to be inapplicable to any such releases.

Location.-- The only change in location of any project facilities is the proposed location of six dissolved oxygen monitors in lieu of the previously proposed temperature monitor at Pottstown.

The six dissolved oxygen monitors will be located in the pool area behind each of the six dams between the Limerick project site and Fairmount Dam. The six dams and the location of each are as follows:

Fairmount Dam	92.47 - 8.49
Flat Rock Dam	92.47 - 15.6
Plymouth Dam	92.47 - 20.7
Norristown Dam	92.47 - 23.95
Black Rock Dam	92.47 - 36.6
Vincent Dam	92.47 - 44.7

A seventh dissolved oxygen monitoring station presently exists at the Limerick site and PECO will continue to sample at this location.

No changes are proposed in the location of any of the intake or discharge facilities as described in Docket D-69-210 CP (Final).

Physical features.

a. Design criteria.— The applicant proposes substitution of dissolved oxygen limitations of a daily average of 5.0 mg/l and 4.0 mg/l instantaneous in lieu of the current temperature limitation (59° F) in order to reduce the number of days that PECO would be required to replace evaporative losses at the Limerick Unit I.

The proposed dissolved oxygen monitoring will include water sampling at least six times per day at regular intervals. The location of the dissolved oxygen monitors will be in the pool area upstream of each dam where the minimum level of dissolved oxygen should occur and the specific location of each monitor will be based on accessibility, availability of power and protection from vandalism. The probe will be positioned below the midpoint of the water column to avoid surface effects.

The applicant has also requested to release water from storage, whenever the proposed dissolved oxygen limitations or current flow limitations would require PECO to replace all evaporative losses. Both of these amendments are proposed in order to allow PECO to start and complete the testing of the Limerick I facility prior to having a permanent alternative water supply available.

The quantity of water that will be needed to operate Limerick will vary with the testing schedule as the plant gradually ascends to full power. Following approval of the full power license, PECO would intend to build up to full power over a period of five months. The range of operations expected over this period is as follows:

Months 1-2	June-July	10-50% of full power	10 cfs
Month 3	August	50-75% of full power	17 cfs
Months 4-7	September-December	75-100% of full power	22 cfs-average 27 cfs-peak

b. Facilities.-- All existing facilities of the Limerick Electric Generating Project remain as approved by Docket D-69-210 CP (Final) and the only new facilities required by this application for revision is the addition of the dissolved oxygen monitors.

The requested release of water from existing storage could include existing storage and release facilities, and would not involve any new construction.

Cost.-- The overall cost of the proposed dissolved oxygen monitors is estimated to be \$95,000.

Relationship to the Comprehensive Plan.-- The applicant is requesting revision of the Limerick Generating Station Project as included in the Comprehensive Plan by Docket D-69-210 CP (Final).

The applicant has also requested that water be released from storage regulated by the Commission whenever docket constraints would otherwise prohibit the evaporative use at the Limerick Generating Station. The only storage presently owned and regulated by DRBC in the Schuylkill Basin is storage in Blue Marsh Reservoir. The DRBC Comprehensive Plan provisions governing the use of Blue Marsh Reservoir are included in DRBC Resolution No. 84-7, adopted on April 25, 1984, and also included in Article 2 of the Commission's Water Code of the Delaware River Basin; Section 2.5.5. Coordinated Operation of Lower Basin and Hydroelectric Reservoirs During a Basinwide Drought.

FINDINGS

The Limerick Generating Station was included in the Comprehensive Plan by Docket decision D-69-210 CP (Final) on November 5, 1975, which also incorporated the project description and docket decision D-69-210 CP dated March 29, 1973. Docket D-69-210 CP (5/29/73) includes a section headed "FINDINGS" subheading "Source of Water Supply 1. Schuylkill River" which reads as follows:

"Schuylkill River water at the plant site may be used for nonconsumptive use whenever the effluent discharged back to the river meets all applicable water quality standards.

"Schuylkill River water at the plant may be used for consumptive use when flow (not including future augmentations of flow from Commission-sponsored projects) as measured at the Pottstown gage is in excess of 530 cfs (342 mgd) with one unit in operation and 560 cfs (362 mgd) with two units in operation with the following exceptions:

"(a) There shall be no withdrawals when river water temperatures below the Limerick station are above 15° C except during April, May and June when the flow as measured at the Pottstown gage is in excess of 1791 cfs (1158 mgd).

"(b) Use of the Schuylkill River will be limited to a withdrawal that will result in an effluent that meets all applicable water quality standards.

"The constraints on nonconsumptive use of Schuylkill River water are necessary to prevent violation of total dissolved solids, stream quality objectives and effluent quality requirements of the Commission's water quality regulations. The constraint on consumptive use of Schuylkill River water is to protect water quantity and water quality below the Limerick Station. Both sets of constraints would be suspended in the event of any operational emergency requiring a shutdown of the plant."

DRBC Resolution No. 84-7 (Basin Water Code, Section 2.5.5) incorporates into the Comprehensive Plan provisions governing the operation of major basin reservoirs during periods of drought. Pertinent provisions include:

"During 'drought' conditions as defined by Figure 1 in Section 2.5.3A, the Francis E. Walter, Prompton, Beltzville, Blue Marsh, Nockamixon, Lake Wallenpaupack and Mongaup hydroelectric reservoirs will be utilized to complement the drought management operations of the New York City reservoirs.

"While it is clearly understood that the water supply storage at Beltzville and Blue Marsh reservoirs is to be used for water supply and to control salinity intrusion into the Delaware estuary during low flow periods, it is also recognized that extensive recreational development is established on these lakes, which should be protected to the extent possible. Accordingly, the operation plans for both of these reservoirs, as well as Nockamixon, in drought emergencies have recognized these multiple uses, with water supply having precedence."

Substitution of DO monitoring for the existing temperature constraint would provide only marginal additional water availability for testing at the Limerick Unit I facility.

The applicant has estimated that the impact of substituting the proposed dissolved oxygen limitations for the temperature constraint during various hydrologic conditions would be as follows.

- Under a repeat of the drought year 1966, water could only have been withdrawn for 122 days under present constraints of flow and temperature. Substituting a DO standard for temperature would have permitted withdrawals 50 more days. However, only 20 more of those days would have been in the months of June through December (the period of the Limerick testing program).

- In a repeat of drought year 1980, substitution of a DO standard would have permitted Limerick withdrawals only 4 additional days.
- In 1981, use of DO standard in place of temperature limitation would have allowed Limerick to use Schuylkill water only 5 more days between June and December.
- In 1968 (a normal year), water would have been available for Limerick on 177 days under present temperature and flow constraints. Substitution of a DO standard for temperature would have allowed water withdrawals 41 more days.

The beneficial impacts to PECO of substituting DO conditions for the current temperature restriction during the proposed testing program is uncertain. In its amended application, PECO states:

"In conclusion, the effect of the removal of the temperature restriction is uncertain at best, particularly during a drought year; and it is clear that supplemental water from storage is essential. Nevertheless, the temperature limitation should be lifted for 1985 and the DO monitoring approach adopted because it appears likely that at least a few days would be "saved" in 1985 with the corresponding reduction in need for water from storage." (emphasis added)

On the other hand, during the course of the DRBC hearing, Vincent S. Boyer (PECO Senior Vice President - Nuclear Power) testified that if the DO standards were triggered, plant operations could be suspended rapidly by tripping the reactor shutdown, but reductions "under a controlled manner" would take a matter of 8-10 hours. If DO conditions improved, it would take 10 to 15 hours to bring the plant back to the power levels prior to shutdown, in order to allow the continuation of the testing program.

Mr. Boyer further testified that the test program could be interrupted under certain conditions. The test regimen does not require PECO to operate Limerick a certain number of days at a continuous level. Certain tests need to be run for a period of time to obtain power calibration data and other information, "but these are generally fairly short number of hours," and the "test program can be interrupted or adjusted to accommodate the water requirements."

Exhibits introduced into the hearing record by the DRBC General Counsel, David Goldberg, (DRBC-1 and DRBC -2) addressed the rationale for the 59° C trigger restriction. In those exhibits, it is pointed out that DRBC's reason for the 59° C limitation relates to protection of an acceptable dissolved oxygen standard; and further, that higher water temperatures increase the biological demand rate which in turn reduces the dissolved oxygen concentration.

Several issues were raised in the DRBC hearings regarding the adequacy and accuracy of the DO monitoring program proposed by PECO.

Location and Specification of Monitoring: PECO has proposed to install automatic recording monitors for DO to sample oxygen levels in "mid-depth" above each of the 6 dams. To date, however, PECO has not identified the precise locations of the proposed monitors, or specifications of the equipment. PECO initiated inquiries regarding the availability of monitors and installation requirements. The proposed monitors would utilize a radio signal to transmit data to the Limerick operations center; thus, power supply and telephone connections are not deemed critical. PECO has been asked to provide additional specifications regarding the proposed monitors, including information showing how it intends to obtain access for installation of the facilities.

Installation of the DO monitors will require some time to complete. In the interim, PECO proposes to monitor DO in the 6 pools manually six times per day. This daily monitoring regime is required to track the diurnal changes of DO in the river water.

The Pennsylvania Fish Commission has stated that it could approve the substitution of the DO monitoring for the temperature restriction, upon certain conditions. Among other requirements, the Fish Commission has recommended that:

"An accurate recording D.O. meter must be installed above and within 200 feet of each dam located below the Limerick intake on the Schuylkill River. These must be connected to the control center at the Limerick plant and must be properly maintained to insure the meters' accuracy."

Accuracy of Monitors: PECO has proposed to use automatic telemetered DO monitors located in the pools above the Schuylkill River dams below Limerick. Proper operation of such monitors requires careful calibration and checking. Data recovery with automatic telemetered monitors is approximately 95 percent according to the U. S. Geological Survey (USGS). With multiple monitors, as proposed by PECO, more reliability would be built into the monitoring system.

Company v. Independent Monitoring: PECO's application contemplates operation of the monitoring network by the Company. Witnesses at the DRBC hearing criticized this proposal as a "conflict of interest" in letting the "fox guard the chicken coop." The monitoring program would be less subject to criticism if undertaken by an independent agency, for example, the USGS. USGS has broad experience with similar monitoring schemes. PECO could contract with USGS for such services, through a qualified public "cooperator," such as DRBC or PADER. The DRBC presently contracts with the USGS to perform monitoring functions elsewhere in the Delaware Basin.

In comparison to temperature, which is relatively stable and easy to measure, DO in river water varies over the day by a fairly wide range. Such variability creates difficulties in setting appropriate trigger criteria, and adjusting power plant operations and water withdrawals on the basis of such changing conditions.

PECO has formally proposed that withdrawal by Limerick for consumptive use be allowed when Pennsylvania water quality standards for DO are not violated. The applicable standards set forth in 25 Pennsylvania Code Chapter 93 are 5.0 mg/l minimum daily average and 4.0 mg/l minimum instantaneous value. In testimony, however, PECO representatives stated that if the Company saw that DO was "trending towards" the 5 mg/l or 4 mg/l standards, it would seek a release of water from Blue Marsh. The Company "could pick a value" above the 4 or 5 mg/l levels as a trigger point to request a release, but would "need some experience" to identify such a trigger to protect the DO standards. The lack of such specificity in the proposal makes even more troublesome the concept of allowing PECO to self-monitor DO and adjust plant operations as it judges appropriate.

Choice of DO Standard: PECO has proposed to base Limerick operations on Pennsylvania's water quality standards for the Schuylkill. Other witnesses, however, suggested that more restrictive standards may be appropriate to protect fish and aquatic life in the River.

Philadelphia Suburban Water Company (PSWC) noted that "high temperature stress increases the sensitivity of aquatic organisms to disease and toxic pollutants, making the attainment of proper dissolved oxygen criteria particularly important." PSWC recommended the trigger criteria be set according to the National Water Quality Criteria for Dissolved Oxygen. Specifically, the warm water criteria for early life stages is 6.0 mg/l seven day mean and 5.0 mg/l daily concentration. Adoption of such criteria would further reduce the number of days in which Limerick could take water from the Schuylkill without compensation; although a precise calculation of the effect of this revised standard is not available.

Recognizing the special seasonal needs of aquatic life, the Pennsylvania Fish Commission has recommended a two-tiered DO standard for Limerick operations. The Fish Commission proposes that:

"From March 1 to June 15 no water to be withdrawn by Limerick if D.O. values fall below 7 ppm. This is the spawning period for the game species found in the Schuylkill River, and 6-8 ppm of D.O. are necessary to insure successful spawning and incubation for most game species. Flows are usually high enough during this time period so that this D.O. level can be maintained."

"For the remainder of the year the State standards of an average of 5 ppm with no value below 4 ppm would be acceptable providing the lowest readings taken at any of the dams below Limerick are used to determine if the State standards are being met."

Because DO varies over the day, and a number of hours are required to shut down power plant operations if the DO criteria are triggered, it is necessary to establish a buffer or "margin of safety" somewhat above Pennsylvania or Federal water quality standards in order to assure that DO levels will not be violated during actual operations.

Use of Blue Marsh Reservoir: To complement the DO proposal, PECO has requested that DRBC provide or authorize the release of water from upstream storage in the Schuylkill River watershed, to compensate for Limerick use on days when either DO or flow constraints are triggered. The only available storage operated by the DRBC in the watershed is Blue Marsh Reservoir (Berks County). For the period of the testing program, PECO would utilize up to 32.5 cfs of releases daily for Limerick operations. The average consumptive use makeup requirements during the later part of the testing program (September-December) would average 22 cfs.

Blue Marsh Reservoir located on the Tulpehocken Creek near Reading is a multi-purpose reservoir, constructed and operated by the U. S. Army Corps of Engineers. As currently authorized and operated, Blue Marsh contains several storage elements, including: (1) 3000 acre-feet of inactive storage (primarily used for sediment storage); (2) 8000 acre-feet (4035 cfs-days) of water supply storage; (3) 6600 acre-feet (3333 cfs-days) of water quality/low augmentation storage; and (4) 32,400 acre-feet of flood control storage. Within the 32,400 acre-feet of flood control storage, the Corps has adopted the operational practice of raising pool elevations on a seasonal basis by 5 feet, to elevation 290 feet m.s.l. for enhanced recreation benefits. This summer augmented pool, which is provided from April 16 to September 30, in essence borrows 5,274 acre-feet of storage from the normally empty flood control capacity.

According to analyses conducted by PADER and DRBC, Limerick withdrawals from the Schuylkill River during a period of drought, such as 1965, if compensated out of Blue Marsh, would consume more than 5000 cfs-days of storage at full power operations. In a repeat of 1980-81, Limerick Unit 1 would have consumed 4424 cfs-days of storage in Blue Marsh.

During the testing period, the quantity of water consumed by Limerick would be somewhat below average use as the plant builds up to full power. Under to regime proposed by PECO, Limerick would likely require the following quantities of water over the testing period (assuming commencement of operations on June 1):

June-July	610 cfs-days
August	527 cfs-days
September	660 cfs-days
October	681 cfs-days
November	660 cfs-days
December	<u>681 cfs-days</u>

3802 cfs-days

Over this 214 day period, assuming continuing drought conditions now being experienced in the Delaware Basin, it is probable that flows on the Schuylkill River during the summer and fall will drop below the 530 cfs trigger for a majority of the time. (In April 1985, the flow on the Schuylkill dropped below 530 cfs at one of the earliest times on record, and monthly flows set all time new low records - nearly one-third below those experienced during the record drought of 1964-65.) Thus, consumptive use makeup demands upon Blue Marsh of 3000 cfs-days or more might be anticipated if the PECO proposal were approved. This quantity would represent 41 percent of the combined water supply and water quality storage in Blue Marsh.

PECO estimates of consumptive use needs for Limerick in 1985 are somewhat lower. PECO projects a use of 1.5 billion gallons (2322 cfs-days) by the end of October. This would represent 32 percent of the water supply and water quality storage in Blue Marsh. Additional water, of course, would be required to continue operations in November and December.

Under the Basin Comprehensive Plan provisions relating to "Coordinated Operation of Lower Basin and Hydroelectric Reservoirs During Basinwide Drought," Water Code of the Delaware River Basin, Section 2.5.5 (DRBC Resolution No. 84-7), the combined storage of Beltzville, Blue Marsh and Nockamixon Reservoirs is dedicated to provision of releases to augment river flows for salinity control in the Delaware Estuary during periods of basin drought emergency. Operating models developed by DRBC indicate that during a repeat of the drought of record, all of the storage in these three lower basin reservoirs, as well as the New York City reservoirs, would be depleted to meet the requirements of the drought management plan.

In the DRBC Exhibit #4 entered into the hearing record by Mr. Goldberg, the "DRBC Staff Issues and Response Document; March-April 1984 Public Hearing on Proposed Amendment to DRBC Comprehensive Plan Relating to Reservoir Management During Basinwide Drought" dealt with the adverse impacts of evaporating Blue Marsh releases at Limerick:

"Use of releases from storage in the Blue Marsh Project for consumptive use at the Limerick plant would deprive the entire lower Schuylkill River from Limerick to Fairmount Dam of the water quantity and quality benefits which Blue Marsh storage was intended to provide.

"Within this reach of the Schuylkill River from the Limerick plant to Fairmount Dam are eleven water supply withdrawal users, who withdrew 380 mgd in 1982. In this same reach, as of 1982, 28 treated waste discharges contributed 70 mgd in wastes requiring assimilation and 8,450 lbs./day BOD₅."

At any time, the DRBC may call on releases from Blue Marsh Reservoir to enhance poor water quality in the Schuylkill River. If a portion of such releases are evaporated off at Limerick, then their diluting effect will be lost to downstream users.

On Monday, May 13, 1985, the DRBC formally declared a drought emergency for the entire Delaware River Basin. This action followed separate emergency declarations by the Governors of New Jersey and Pennsylvania, and the Mayor of New York City.

Precipitation deficits from August 1984 to the end of April 1985 above Trenton have totalled over 12.9 inches below normal. Nine month precipitation totals over most of the Basin were the worst evidenced in over 80 years of record. Streamflows in the Delaware, Lehigh, and Schuylkill Rivers have been less than one-half of normal. Since February, river flows have been significantly under flows recorded for the same period during the record drought of 1964-65; and streamflows throughout the Basin set new records for the month of April. Currently, combined storage in the three New York City reservoirs, which should be full, is only 61 percent of capacity. Releases from City Reservoirs to meet Montague flow requirements of 1550 cfs were triggered during the week of May 13-17, much earlier than would be expected. Ground water levels in Basin monitoring wells evidence severe drought stress, with levels in many cases within the lowest 10-15 percentile of record. (For example, 4 of 6 monitoring wells in Bucks County set new record lows for April.)

Pursuant to the Commission's drought emergency declaration, DRBC promulgated a series of Conservation Orders invoking the provisions of Water Code 2.5.5 (DRBC Resolution No. 84-7), and placing the storage in the Blue Marsh, Beltzville, Nockamixon, Wallenpaupack and Mongaup Reservoirs under Commission direction for coordinated operation to meet streamflow and salinity control objectives.

The Lower Basin Reservoirs currently have around 30.7 billion gallons of storage to meet drought needs this summer and fall. This storage includes 13 BG in Nockamixon, 13 BG in Beltzville, and 4.7 BG in Blue Marsh. DRBC models indicate that under the drought operations plan (with no allocation of water to Limerick), in a repeat of the drought conditions of 1965, recreation would be sacrificed at Blue Marsh around August 9 and the reservoir would be emptied by approximately September 10. Evidence presented at the DRBC hearings indicates that 1985 is proceeding ahead of conditions experienced in 1965, by nearly 3 weeks.

The proposal presented by PECO to allocate water from Blue Marsh during 1985 is clearly inconsistent with the provisions of the DRBC Comprehensive Plan relating to drought operations, and would tend to further exacerbate the drought stresses and drawdowns on Blue Marsh and other Basin reservoirs.

In its application, PECO "recognizes that Blue Marsh must be available to assist in meeting the needs of downstream users in a drought and that DRBC has authority to utilize the water supply storage of Blue Marsh to meet downstream water quality objectives." Nevertheless, PECO argues:

"[T]he temporary short-term use of Blue Marsh should not be precluded simply because drought conditions might arise which require releases from the water supply storage. Under the 'pooled water' concept, drought hardships must be shared equitably among all Basin users. Equitable demand upon all impoundments would be made to meet flow augmentation needs for water supply and water quality in a drought period."

PECO's argument appears to miss the critical point. Major basin water storage is being marshalled under the DRBC drought operations plan to meet essential water supply and salinity control needs. Experience and model simulations show that all of this storage may well be exhausted just to meet the requirements of the operating plan in protecting Estuary public water supplies and other existing users.

Moreover, the applicant is seeking the approval to operate under drought conditions when existing docket conditions could preclude the operation even if the Delaware diversion into the Perkiomen Creek project was fully operational and the flow of the Delaware at Trenton was less than 3000 cfs.

PECO's proposal, which would allocate substantial quantities of water for just one user, would place an additional draft on already stressed resources, and tend to exhaust limited storage even earlier under these drought conditions. The result would be to place downstream water users, including those reliant on the Camden and Philadelphia water supply systems, at substantially increased risk.

The DRBC Comprehensive Plan policy on priorities of water use during drought emergencies give first priority to those uses which sustain human life, health and safety (Water Code, Delaware River Basin, Section 2.5.2).

Summary

The objective of the 59° temperature limitation contained in the original docket decision, was to prevent the Limerick project from aggravating dissolved oxygen conditions in the Schuylkill River during critical periods. The temporary substitution of direct dissolved oxygen monitoring at each critical downstream location is consistent with that objective. In addition, the dissolved oxygen monitors will provide data, not otherwise available to the water resource agencies, for better management of the Schuylkill River.

The temporary use of water from Blue Marsh Reservoir for evaporation at Limerick Generating Station conflicts with the Comprehensive Plan as cited above. Understanding the application is for the remaining portion of 1985, DRBC has considered the application presently before it and recognizes the seriousness of the current drought emergency already declared by DRBC and Pennsylvania in making these decisions.

DECISIONS

I. The Comprehensive Plan of the DRBC as amended by Docket D-69-210 CP (Final) on November 5, 1975, is hereby revised as follows:

- (1) For the period ending December 31, 1985, the provisions of Docket D-69-210 CP, [attached and included as part thereof to D-69-210 CP (Final)] headed "FINDINGS", "Sources of Water Supply", "1. Schuylkill River" paragraph "(a)" on page 5 are temporarily suspended, and in place thereof the following provision is substituted:

"(a) No withdrawals for consumptive use shall be made from the Schuylkill River or the natural flow of any of its tributaries whenever dissolved oxygen in the Schuylkill River at or below Limerick as measured at any one or more of the monitoring locations: (i) is less than 7.0 mg/l instantaneous during the period March 1 to June 15, or (ii) is equal to or less than 5.1 mg/l daily average or equal to or less than 4.2 mg/l instantaneous value during the remainder of the year."
- (2) For the period ending December 31, 1985, the following conditions shall be added to the provisions of Docket D-69-210 CP (Final), "DECISION" on page 15, subheaded "II.":

"o. An accurate recording dissolved oxygen monitor shall be installed above and within 200 feet of each dam on the Schuylkill River located below the Limerick intake.

"p. Detailed plans of the location of each dissolved oxygen monitor and the equipment specifications shall be submitted to and approved by the Executive Director prior to installation.

"q. The installation, calibration, maintenance and operation of all dissolved oxygen monitors and any interim manual measurements of dissolved oxygen shall be under the supervision and control of the U.S. Geological Survey.

"r. Weekly records of all dissolved oxygen monitoring shall be submitted to the Commission in writing within three working days, together with a log of power plant operations and consumptive water use. Such information shall be a matter of public record.

"s. PECO shall immediately notify the Commission whenever dissolved oxygen levels at any monitoring station trigger the criteria set forth in this docket, and advise the Commission of steps taken to terminate power plant operations."

- (3) The provisions set forth in paragraphs (1) and (2) above shall terminate on December 31, 1985, unless otherwise extended or directed by the Commission, and all prior provisions of Docket D-69-210 CP temporarily suspended by this docket shall become operative in full force and effect.

II. The above revisions of the Limerick Nuclear Generating Station project are approved pursuant to Section 3.8 of the Compact, subject to the conditions listed above.

III. The request that DRBC release water from storage at Blue Marsh Reservoir or other facilities whenever dissolved oxygen limitations or flow limitations would require PECO to replace all evaporative losses at the Limerick Nuclear Generating Station is hereby denied.

BY THE COMMISSION

DATED: May 29, 1985