Duquesne Light

Nuclear Construction Division
Robinson Plaza, Building 2, Suite 210
Pittsburgh, PA 15205

2NRC-5-036
(412) 787-5141
(412) 923-1960
Telecopy (412) 787-2629

March 4, 1985

United States Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Mr. George W. Knighton, Chief
Licensing Branch 3
Office of Nuclear Reactor Regulation

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
NPDES Permit

Gentlemen:

As indicated in ER-OL Appendix 5A, please find enclosed a copy of the BVPS-2 National Pollutant Discharge Elimination System (NPDES) Permit PA 0025615 issued on November 26, 1984. Also enclosed is a notice of appeal dated December 28, 1984.

It is the intention of Duquesne Light Company that the ER-OL will not be amended to include the NPDES Permit. If you have any questions, please contact T. J. Zoglmann at (412) 787-5141.

DUQUESNE LIGHT COMPANY

By _____
E. J. Woolever
Vice President

TZJ/wjs
Enclosure

cc: Mr. B. K. Singh, Project Manager (w/e)
Mr. G. Walton, NRC Resident Inspector (w/e)

SUBSCRIBED AND SWORN TO BEFORE ME THIS
1st DAY OF March, 1985.

Anita Elaine Reiter
Notary Public

ANITA ELAINE REITER, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986

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AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

The Vice President, Nuclear Group, J. J. Carey, being first duly sworn, deposes, and says: that he is Vice President, Nuclear Group, of Duquesne Light Company; with legal authority to sign official correspondence on behalf of the Vice President - Nuclear Construction Division, Earl J. Woolever, in relation to licensing for Beaver Valley Power Station, Unit 2 and therefore authorized to submit the foregoing on behalf of the applicant.

3-4-85
Date

J. Carey
Vice President, Nuclear Group

Sworn and subscribed before me,
this 4th day of March, 1985.

Anita Elaine Reiter
Notary Public

ANITA ELAINE REITER, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986

RECEIVED 11/29

SP

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF WATER QUALITY MANAGEMENT
Highland Building
121 South Highland Avenue
Pittsburgh, Pennsylvania 15206-3988 (412) 665-2900

Duquesne Light Company
One Oxford Centre
301 Grant Street
Pittsburgh, PA 15279

NOV 2 1984

RE: NPDES Permit PA0025615
Duquesne Light Company
Beaver Valley Power Station
Shippingport Borough
Beaver County

Gentlemen:

Your NPDES permit is enclosed. Please note that we have made several modifications to the draft permit sent to you via letter of April 20, 1984. These changes are in response to your comment letters of June 4, 1984 and October 30, 1984.

The most significant modifications were in response to your comments that:

1. A continuous chlorine monitor currently exists and is being used at the discharge weir (Outfall 001) and not at the unit #1 condenser outlet as previously supposed and

2. That you are now proposing to route several sources:

   009-unit #2 cooling tower blowdown and treated rad waste
   110 - the auxiliary boiler blowdown and
   210 - the chemical feed area drains

   to Outfall 001.

Based on thc e comments, the following changes have been made:

A. Those sources labeled as 110 (auxiliary boiler blowdown) and 210 (chemical feed area drains) by the draft permit, will now be labeled 301 and 401 respectively. Identical effluent limitations as the draft permit apply, with those exceptions as explained below.

B. Outfall 009 has been deleted from the permit. Monitoring and limitations for free available chlorine on the Unit #2 cooling tower blowdown are now specified at the discharge weir for Outfall 001.

That being stated, the following comments address your comments in the order presented in your letter:

Part A, Outfall 101, Page 2(a) of 14

The sample type for total suspended solids has been changed from a 24-hour composite to a 2-hour composite.

Part A, Outfall 201, Page 2(b) of 14

The sample point for free available chlorine has been changed from the discharge of the condenser to the discharge weir (Outfall 001) as requested. All limitations, monitoring requirements, and prohibition initially placed on 201 have been imposed on Outfall 001 and I.M.P. 201 has been eliminated.

Part A, Outfall 301, Page 2(c) of 14

The pH monitoring requirement has been deleted. As above I.M.P. 201 has been eliminated, I.M.P. 301 is now relabeled as 201.

Part A, Outfall 001, Page 2(d) of 14

See response to comments (B), and above Outfall 201.

Part A, Outfall 103, Page 2(g) of 14

The 24-hour composite sample type for total suspended solids has been maintained. However, as requested in your letter of 10/30/84, the sample type has been changed from "measured" to "estimated."

Part A, Outfall 007, Page 2(m) of 14

The pH moitoring and reporting requirement has been deleted as requested.

The permit already contains wording which requires monitoring for chlorine only during discharges from the reactor plant river water system.

Part A, Outfall 009, Page 2(n) of 14

As stated previously, Unit #2 cooling tower blowdown and treated rad waste is now controlled by the effluent limitations and monitoring requirements at 001; Outfall 009 has been eliminated.

Part A, Outfall 110, Page 2(p) of 14

As explained previously, I.M.P. 110 is redesignated as 301 as this source is now tributary to Outfall 001.

The pH limit has been deleted.

Part A, Outfall 210, Page 2(g) of 14

As explained previously, I.M.P. 210 is redesignated as 401 as this source is now tributary to Outfall 001.

The upper pH limit has been deleted.

Part A, Outfall 010, Page 2(r) of 14

The monitoring requirements for free available chlorine have been changed from continuous/recorded to a grab sample once per week.

The pH monitoring requirement has been deleted.

Part C, Requirement h, Page 14(b) of 14

As you are aware, requirement (h) is a standard condition taken from the Federal Guidelines and reads as follows: "Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day....unless the utility can demonstrate to the Regional Administrator or State, if the State has NPDES issuing authority, that the unit(s) in a particular location cannot operate at or below this level of chlorination."

What you seem to have concluded from your 1977 study was that during your normal power operations, the discharge of free available chlorine occurs beyond the 2-hour limit 36% of the time and further, that the discharge of total residual chlorine exceeded the 2-hour limit 63% of the time (page 1 of 3). You also appear to be saying that this discharge of chlorine over the 2-hour limit is a result of a "trail-out" effect, that is, that the discharge of chlorine occurs long after the dosing period has been completed. However, the study does not say what the dosing period is, and therefore does not really demonstrate a "trail-out" effect since the duration of chlorine discharge may correspond to the dosing period.

Assuming however, that the dosing period was and is limited to two hours (as you say it will be in your letter) and that a trail-out effect does occur, my feeling is that this situation is not what EPA intended to allow for when considering the granting of exclusions from the 2-hour discharge requirement. Indeed, I do not believe based on my review of past development documents and guidelines, that EPA ever considered the possibility of a trail-out effect. Rather, the exclusion appears to be specific to only a very few plants with unusual needs for crustacean control.

It is my opinion that the 2-hour limit was and is intended to be a limit of "dosing time" rather than trail-out time. See EPA 1974 Development Document, page 409 - "free available chlorine discharges in both recirculating and non-recirculating cooling water systems are to be limited to average quantities reflecting concentrations of 0.2 mg/l during a maximum of two hours a day (aggregate)..." and "generally chlorination is not required at higher chlorine levels or for more than two hours each day for each unit."

None of the information I have indicates that this particular station has an excessive need for chlorine. Therefore because this has not been demonstrated, I have not deleted the 2-hour requirement. Furthermore, I would suggest that rather than being a site specific problem, this may be an industry wide problem and should be addressed at the Federal Effluent Guidelines division level of EPA.

You also noted in your letter that the revised flow diagrams reflecting the current situation would be following. Please see that these are submitted as soon as possible so that we may have a complete copy of this application for our files.

Finally because the permit or amendment authorizes a sewage discharge, it does not become operative until it is recorded in the office of the Recorder of Deeds in the county where the sewage discharge is located. Please take the enclosed permit or amendment plus the enclosed notary form and certificate to the Recorder. After the Recorder fills out the certificate, please return the certificate only to our Harrisburg office in the enclosed envelope.

Please study your permit carefully, and if you have any questions, please contact me.

Sincerely,

Deborah L. McDonald

Deborah L. McDonald
Sanitary Engineer

DLM/ld: c r t

Enclosure

cc: EPA
Operations Section
ORSANCO