

January 31, 1990

Docket Nos. 50-454  
and 50-455

Thomas J. Kovach  
Nuclear Licensing Manager  
Commonwealth Edison Company  
OPUS West III  
1400 OPUS Place, Suite 300  
Downers Grove, Illinois 60515

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Docket File	NRC & Local PDRs
PDIII-2 r/f	LLuther
LOlshan	OGC
EJordan	ACRS (10)
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Dear Mr. Kovach:

SUBJECT: ENVIRONMENTAL ASSESSMENT OF EXEMPTION REQUEST RELATED TO USE OF VANTAGE 5 FUEL FOR BYRON STATION, UNITS 1 AND 2 (TAC NOS. 74166 and 74167)

Enclosed is a copy of an "Environmental Assessment and Finding of No Significant Impact" for your information. This notice relates to your request dated July 31, 1989.

The request is for an amendment to the Technical Specifications to allow use of Vantage 5 fuel.

The assessment has been forwarded to the Office of the Federal Register for publication.

Sincerely,  
/s/

Leonard N. Olshan, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

cc w/enclosure:  
See next page

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LLuther	LOlshan:ta
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OGC  
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*(with initials)*

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

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Sincerely,

A handwritten signature in cursive script, appearing to read "Leonard N. Olshan".

Leonard N. Olshan, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

cc w/enclosure:  
See next page

Mr. Thomas J. Kovach  
Commonwealth Edison Company

Byron Station  
Units 1 and 2

cc:

Mr. Jack Tain  
Atomic Power Distribution  
Westinghouse Electric Corporation  
Post Office Box 355  
Pittsburgh, Pennsylvania 15230

Regional Administrator  
U. S. Nuclear Regulatory  
Commission  
799 Roosevelt Road, Bldg. #4  
Glen Ellyn, Illinois 60137

Michael Miller, Esq.  
Sidley and Austin  
One First National Plaza  
Chicago, Illinois 60690

Illinois Department of  
Nuclear Safety  
Office of Nuclear Facility Safety  
1035 Outer Park Drive  
Springfield, Illinois, 62704

Mrs. Phillip B. Johnson  
1907 Stratford Lane  
Rockford, Illinois 61107

Joseph Gallo, Esq.  
Hopkins and Sutter  
888 16th Street, N.W.  
Suite 700  
Washington, D.C. 20006

Ms. Lorraine Creek  
Rt. 1, Box 182  
Manteno, Illinois 60950

Douglass Cassel, Esq.  
109 N. Dearborn Street  
Suite 1300  
Chicago, Illinois 60602

Dr. Bruce von Zellen  
Department of Biological Sciences  
Northern Illinois University  
DeKalb, Illinois 61107

Ms. Pat Morrison  
913 N Main Street #707  
Rockford, Illinois 61103-7058

Mr. Edward R. Crass  
Nuclear Safeguards & Licensing  
Sargent & Lundy Engineers  
55 East Monroe Street  
Chicago, Illinois 60603

Attorney General  
500 South 2nd Street  
Springfield, Illinois 62701

U. S. Nuclear Regulatory Commission  
Byron/Resident Inspectors Offices  
4448 North German Church Road  
Byron, Illinois 61010

Chairman, Ogle County Board  
Post Office Box 357  
Oregon, Illinois 61061

EIS Review Coordinator  
Environmental Protection Agency  
Region V  
230 S. Dearborn Street  
Chicago, Illinois 60604

Commonwealth Edison Company  
Byron Station Manager  
4450 North German Church Road  
Byron, Illinois 61010

UNITED STATES NUCLEAR REGULATORY COMMISSIONCOMMONWEALTH EDISON COMPANYDOCKET NOS. 50-454 AND 50-455ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to the licenses for the Commonwealth Edison Company (CECo, the licensee) for Byron Station, Units 1 and 2, located in Ogle County, Illinois.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The proposed amendments would allow the use of Vantage 5 fuel.

These revisions to the licenses of Byron Station, Units 1 and 2, would be made in response to the licensee's application for amendment dated July 31, 1989.

The Need For The Proposed Action:

Pursuant to 10 CFR 50.90, the licensee has proposed amendments to Facility Operating Licenses NPF-37 and NPF-66 for Byron Station, Units 1 and 2, respectively. The amendments would allow the use of Vantage 5 fuel.

The Vantage 5 fuel design has already been approved by the NRC, with certain conditions and has several differences from the fuel currently being used. These include: integral burnable absorbers, intermediate flow mixer grids, reconstitutable top nozzle, extended burnup capability, axial blankets and debris filter bottom nozzle.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed revision to the Technical Specifications. The loss-of-coolant accident was reanalyzed and the

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results meet the criteria of 10 CFR 50.46. The proposed changes do not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

With regard to nonradiological impacts, the proposed amendment involves systems located entirely within the restricted area as defined in 10 CFR Part 20. They do not affect nonradiological plant effluents and have no other environmental impact. Therefore, the Commission also concludes that there are no significant nonradiological environmental impacts associated with the proposed amendments.

Alternative to the Proposed Actions:

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operation flexibility.

Alternative Use of Resources:

This action does not involve the use of resources not previously considered in connection with the Nuclear Regulatory Commission's Final Environmental Statements for the Byron Station, Units 1 and 2 dated April 1982.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's submittal of July 31, 1989 and did not consult other agencies or persons.

Finding of No Significant Impact:

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

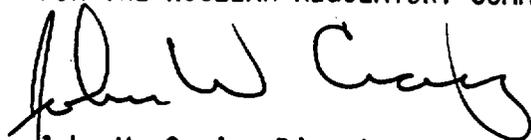
Based upon this environmental assessment, the Commission concludes that the proposed action will not have a significant adverse effect on the quality of the human environment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the Federal Register on September 11, 1989 (54 FR 37518). No request for hearing or petition for leave to intervene was filed following this notice.

For further details with respect to this action, see the request for amendments dated July 31, 1989 and the Final Environmental Statement for Byron, dated April 1982 which are available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C. 20555, and at the Rockford Public Library, 215 N. Wyman Street, Rockford, Illinois 61101.

Dated at Rockville, Maryland this 24th day of January 1990.

FOR THE NUCLEAR REGULATORY COMMISSION



John W. Craig, Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects