

507387/388

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TO: Mr Regan

FROM: Pa Power & Light Co
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DESCRIPTION

Ltr documenting responses to questions informally transmitted in telephone conversations dtd 1-17-77 & 1-18-77 & concerning transmission lines.....

21

PLANT NAME: Susquehanna 1 & 2

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ASSIGNED AD:

ASSIGNED AD: *V. Moore*

BRANCH CHIEF:

BRANCH CHIEF: *Regan*

PROJECT MANAGER:

Miner

PROJECT MANAGER: *Bajwa*

LIC. ASST. :

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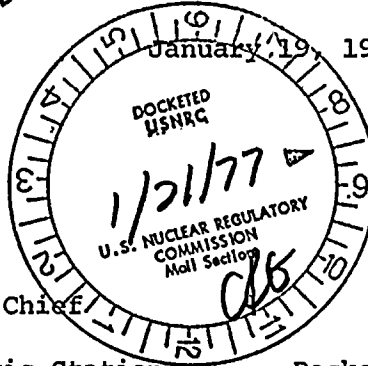
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JAN 19 1977

Regulatory Docket File

Division of Reactor Regulation
Environmental Projects Branch No. 3
U. S. Nuclear Regulatory Commission
Washington, DC 20555.



Attention: Mr. William H. Regan, Jr., Chief

Re: Susquehanna Steam Electric Station Docket Nos. 50-387
Additional Information 50-388
ER 100450 File 991-2
PLA-159

Dear Mr. Regan:

This letter is to document the responses to the following questions which were given to your Mr. Singh Bajwa from our Mr. E. D. Testa in telephone conversations on 1/17/77 and 1/18/77:

1. What percentage of the Lackawanna-Jefferson 500KV Line occupies Forest Land, and how much is across open land?

Answer: A study was made of the area to be crossed by the Lackawanna to Jefferson Line, but an actual line route was not defined pending a decision to pursue this line. The study area included the Lackawanna County-Scranton area, the Pennsylvania-Pocono area and the Sussex County-New Jersey area. Since the exact route was not determined, the percentage of Forest and open land cannot be determined; however, the area is predominantly wooded.

Approximately one-third of the line route would have paralleled an existing single circuit 230KV line and the remaining two-thirds would have established a new corridor. Approximately 18% of the study area is occupied by state owned Forest or Game lands.

The study area occupies land possessing significant scenic qualities and leisure activity potential.

The Lackawanna County-Scranton area is a diversified slow growth urban center which influences about 15% of the study area. The Pocono Mountain region is highly scenic and is undergoing rapid development as a second home and recreation area; the Pocono area comprised approximately 60% of the study area. Sussex County, New Jersey makes up the remaining 25% of the study area. Agriculture is significant here, though the outstanding aspect is the increasing conversion of many summer homes to year round residences. This is due primarily to the high scenic quality and accessibility to metropolitan areas resulting from completion of the interstate highway system.





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Mr. W. H. Regan, Jr.

January 19, 1977

There is the possibility that the route may have crossed the Delaware Water Gap National Recreational Area and the Tocks Island Reservoir.

2. Was consideration given to installing the Susquehanna-Siegfried Line on the same structures as the line being paralleled, where the line crosses the Appalachian Trail?

Answer: The concept of installing the 500KV Susquehanna-Siegfried Line on the same structures as the paralleled line where they cross the Appalachian Trail was not considered because the Trail follows the ridge of the Blue Mountain and placing the circuits on one set of structures would require triple circuit structures since the present structure contains two 230KV circuits. The triple circuit structures would be higher (approximately 180' vs 115' for a single circuit) and wider and would have dominated the horizon as viewed from the north and from much of the heavily populated Lehigh Valley to the south.

The Army Corps of Engineers requested a feasibility study of crossing the Beltzville Dam by double circuiting with the existing line; however, our study and report, which has been accepted by the Army Corps of Engineers, recommends the circuits be installed on separate structures. The existing line will be rebuilt for double circuit 138KV operation in the near future.

From reliability point of view, in certain instances where transmission lines perform different electrical functions, it may be possible to consider placing three circuits on a single tower.

However, on the PP&L system the 500KV and 230KV transmission lines perform essentially the same bulk power electrical function,

PP&L presently plans to cross the Appalachian Trail with the Susquehanna-Siegfried 500KV single circuit line on a common right of way with the East Palmerton-Siegfried 230KV double circuit line. It is highly undesirable to place these circuits on triple circuit structures at the trail crossing. All of these circuits are of vital importance to the bulk power system. The placement of these circuits on triple circuit structures would significantly increase the likelihood of a simultaneous triple circuit outage. Depending on the bulk power system conditions, such an outage could cause extremely unfavorable results. From a transmission's reliability point of view, it is highly undesirable to place these circuits on triple circuit structures.



PP&L

TWO NORTH NINTH STREET, ALLENTOWN, PA. 18101 PHONE: (215) 821-5151

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Pennsylvania**



So your children can tell
their children.

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If you have any further questions please contact us.

Very truly yours,

N. W. Curtis / pww

N. W. Curtis
Vice President
Engineering & Construction

