UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

APR 29 1974

DOCKET NO: 50-286

APPLICANT: Consolidated Edison Company of New York, Inc.

FACILITY: Indian Point Nuclear Generating Station, Unit No. 3

SUMMARY OF MEETING HELD ON APRIL 22, 1974 WITH NEW YORK STATE CONCERNING THE GEOLOGY AND SEISMOLOGY SECTIONS OF THE APPLIANT'S FINAL SAFETY ANALYSIS REPORT FOR INDIAN POINT 3

On April 22, 1974, representatives of the Atomic Energy Council and State Geological Survey of New York State met with the Regulatory staff in Bethesda, Md. to discuss the deficiencies and inadequacies of the Geology and Seismology sections of the applicant's FSAR for Indian Point 3. A list of attendees is attached.

Prior to this meeting we had received comments on our Draft Environmental Statement for Indian Point 3 from the New York State Department of Environmental Conservation. These comments were contained in a letter to the Deputy Director for Reactor Projects dated December 17, 1973. The comments in that letter stated that the geology and seismology presentations in the Draft Environmental Statement, the Safety Evaluation Report, and the applicant's FSAR were inadequate and deficient.

Subsequent to that letter, the State Geological Survey provided additional information to the Atomic Energy Council which quantified the seismology of the site and the region. At that time the Atomic Energy Council initiated a request for a meeting with the Regulatory staff to discuss the specific concerns of the State Geological Survey.

At this meeting the State Geological Survey presented its concerns regarding the geology and seismology of the region and the site. The State Geological Survey made the following contentions which are extracted verbation from its letter of April 19, 1974 to the Atomic Energy Council:

1. In light of recent developments in studies of eastern United States seismicity and because of certain errors and omissions in the FSAR for Indian Point plants both the possibility of seismic activity and the maximum acceleration possible at the site have been significantly under-estimated.

2. Because of the proximity of the Indian Point site to the metropolitan New York area, every effort must be taken to ensure that adequate seismic risk analysis is made for the site.

8111140529 740429
PDR ADOCK 05000286
P PDR

DOCKET NO. 50-286

DISTRIBUTION OF MEETING SUMMARY
DATED April 29 FOR INDIAN POINT NUCLEAR GENERATING
UNIT NO. 3

Mr. William J. Cahill, Jr.
Consolidated Edison Company
of New York, Inc.

Angus Macbeth, Esq.
Natural Resources Defense
Council, Inc.

Arvin E. Upton, Esq.
LeBoeuf, Lamb, Leiby, and MacRae

Nicholas A. Robinson, Esq.
Marshall, Bratter, Greene,
Allison and Tucker

Mr. J. Bruce MacDonald
New York Department of Commerce

Honorable Louis J. Lefkowitz
New York State Attorney General

Docket File
AEC PDR
Local PDR
L Reading (M. Groff)
RP Reading (E. Hughes)
R. C. DeYoung
V. A. Moore
R. Denise
D. Skovholt
D. Muller
K. Goller
D. B. Vassallo
W. Butler
O. D. Parr
J. Stolz
K. Kniel
A. Schwencer
R. Clark
R. Ireland
R. F. Schemel
D. L. Ziemann
P. L. Collins
G. W. Knighton
G. Dicker
B. J. Youngblood
W. H. Regan, Jr.
S. Varga
R. W. Klecker
J. M. Hendrie

H. Denton
R. Maccary
R. Tedesco
V. Stello
V. Benaroya
C. Long
J. Kastner
R. Vollmer
G. Lainas
D. Ross
T. Ippolito
W. Houston
J. Knight
S. Pawlicki
L. Shao
B. Grimes
W. Gammill
R. Ballard
P. Fine
T. Novak
M. Spangler
EP Project Manager -
OGC - M. Karman & S. Treby
J. Lee
RO (3)
R. F. Fraley, ACRS (16)
LWR 1-1 Reading
LWR 1-1 File
M. Oestmann
C. Stepp
S. Coplan
R. McMullin
M. Aycock
J. Angelo

APR 29 1974

3. The historical record indicates that earthquakes producing at least Intensity VII are possible in the region around Indian Point.

4. Historical and recent earthquake activity in the area indicate that the Ramapo fault complex, which extends to within 3000 feet of the Indian Point site, should be considered a structure capable of producing damaging earthquakes.

5. Because of differences in seismic source and transmission characteristics for the western and eastern United States, maximum acceleration calculated on the basis of available western United States data should be considered under-estimates when applied to eastern sites such as Indian Point.

6. The available geologic and seismologic data have been re-evaluated by the State Geological Survey in the context of the new Appendix A to 10 CFR Part 100, and in our opinion requires further evaluation of the data and bases upon which the characteristics of the Safe Shut Down Earthquake for the Indian Point plants were concluded.

The staff remarked that omissions or lack of discussion in the FSAR do not necessarily indicate a deficiency in evaluation of the site geology and seismology. We remarked that we and our consultant (USGS) have information related to the region which is used in the evaluation, and that we do not always require that an applicant update or revise the FSAR to include this data.

We could not agree that the data support the contention that the Ramapo fault should at this time be considered a structure capable of producing damaging earthquakes or considered to be a capable fault within the definition of Appendix A to 10 CFR Par 100. In this regard the staff agrees that there would be some merit to the program proposed by the State Geological Survey to collect additional data that can be used to assess the activity of the fault.

Finally, we informed the New York State representatives that we and our consultant would give consideration to the data presented by the State Geological Survey, and that we would meet with them again in about a minimum of three weeks.

John Angelo

John Angelo, Project Manager
Light Water Reactors Project Branch 1-1
Directorate of Licensing

ATTACHMENT

MEETING WITH NEW YORK STATE
ATOMIC ENERGY COUNCIL AND
STATE GEOLOGICAL SURVEY
INDIAN POINT NUCLEAR GENERATING STATION UNIT 3
APRIL 22, 1974

N. Y. State Atomic Energy Council

Theodore K. DeBoer
Paul W. Ohman
C. John Clemete

N. Y. State Geological Survey

Dr. James W. Davis
Dr. Robert H. Fakundiny
Dr. Paul W. Pomeroy

Office of General Council - AEC

Myron Karman
Stuart Treby

Directorate of Licensing - AEC

H. R. Denton
W. P. Gammill
G. Knighton
D. B. Vassallo
M. J. Oestmann
C. Stepp
S. Coplan
R. McMullin
M. Aycock
J. Angelo

APR 29 1974

a program of geologic mapping in order to confirm that the fault is not "capable." The network will be operated for about a year, after which the staff will review the information developed by the applicant's investigations.

Members of the staff visited the fault area, on May 21, and found that there is indeed a lack of definitive geologic mapping. We also found that beginning in 1962 several pipe breaks occurred near the fault, in the vicinity of Mahwah, N.J., coincident with an increase in the rate of subsidence along the Atlantic seacoast. The sense of the subsidence is consistent with movement on the Ramapo fault. However, the subsiding area is of much greater extent than the Ramapo fault. Thus, the subsidence cannot be reasonably associated with that fault. The meaning of the pipe breaks is unclear. Although they could be indicative of movement in the fault zone, the lack of significant concurrent earthquake activity suggests that an alternate explanation such as landsliding is more likely.

At present we view the evidence as being consistent with movement on the fault, however; each single piece of such evidence is either weak or capable of being explained by other causes. We therefore believe that our original position remains valid and expect that the licensee's investigations will provide confirmation.

DISTRIBUTION:
L-Docket File
L-Rdg
L-SAB
L-AD/SS
LMMuntzing
LVGossick
JFO'Leary
JMHendrie

L. Manning Muntzing
Director of Regulation

Enclosure:
Meeting Notes
HRDenton
WPGammill
DRBudge
JCStepp
SCoplan
GEritter DR-7102
MGroff

L:SAB
DRBudge
6/5/74

L:SAB
JCStepp
6/5/74

OFFICE	L:XXXSAB	L:SAB	L:AD/SS	L:TR	L:[illegible]	DR
SURNAME	SCoplan:bas	WPGammill	HRDenton	JMHendrie	JFO'Leary	LMMuntzing
DATE	6/5/74	6/5/74	6/7/74	6/13/74	6/7/74	6/ /74

Form AEC-318 (Rev. 9-53) AECM 0240 GPO C43 16 81465-1 520-284