

Docket No. 50-367

Northern Indiana Public Service  
Company  
ATTN: Mr. Eugene M. Shorb  
Senior Vice President  
5265 Hohman Avenue  
Hammond, IN 46325



cc w/encl:  
Central Files  
AD/Licensing  
AD/Operating Reactors  
PDR  
Local PDR  
NSIC  
TC  
Dean Hansell, Office of  
Assistant Attorney General

8103160475  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

March 2, 1981

Gentlemen:

The enclosed IE Circular No. 81-03 is forwarded for your information. No written response to this circular is required. If you have any questions related to this matter, please contact this office.

Sincerely,

A handwritten signature in cursive script, appearing to read "A Bert L...".

*to* James G. Keppler  
Director

Enclosure: IE Circular  
No. 81-03

SSINS No.: 6830  
Accession No.:  
8008220271  
IEC 81-03

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

March 2, 1981

IE Circular No. 81-03: INOPERABLE SEISMIC MONITORING INSTRUMENTATION

Description of Circumstances:

On November 8, 1980, an earthquake occurred off the coast near Eureka, California. The earthquake was reported to have a magnitude of 7.0 on the Richter Scale at the epicenter, approximately 25 to 75 miles from the Humboldt Bay Power Plant facility. There were 12 separate seismic events above a magnitude of 3.5 that occurred within 24 hours of the earthquake, the largest event measuring 5.2. Reported damage to structures included several houses that were moved off supporting posts, various chimneys that were knocked down, one highway overpass that collapsed, and unspecified damage that occurred at two pulp mills. There were three potentially different sources of plant response data: three sets of magnetic tape triaxial accelograph recorders; three sets of triaxial film recorders (passive device); and one set of triaxial response spectrum recorders (passive device). A review of the records from these instruments indicated the following: the magnetic tape triaxial recorders did not produce useful records due to a degraded low-voltage power supply in the recording system (previously scheduled for routine servicing one week after the earthquake); a buildup of dirt and dust appeared to make inoperable six of the nine film recorders (the readings from the other three are considered highly unreliable and were not obtained from the same set of triaxial recorders); the triaxial response spectrum recorder was the only instrument believed to produce reliable data.

On January 24, 1980, an earthquake measuring 5.5 on the Richter Scale occurred about 10 miles north of Lawrence Livermore Laboratory (near San Francisco, California). Numerous aftershocks also occurred with one measuring 5.2 on January 26. The damage to civil structures was considered minor. Rancho Seco Nuclear Plant, located approximately 45 miles northeast of the earthquake area, reported no physical damage, although plant personnel felt slight building motion.

Rancho Seco was shutdown for refueling during these earthquakes. During this period, the electrical seismic instrumentation system was inoperable because portions of the system were out for calibration. For the other instruments, power was not being supplied due to electrical cable problems. Whether the seismic instrumentation would have had any effect on the U.S. Geological Survey equipment close to the plant is not known. A peak from a passive recorder showed peak a

DUPLICATE DOCUMENT

Entire document previously  
entered into system under:

ANO

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No. of pages:

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