PDR

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

MAY 24 1979

Mr. James L. Moody, Jr.
Maine State Chamber of Commerce
477 Congress Street
Portland, ME 04101

Dear Mr. Moody:

This is in response to your letter regarding the orders by the Nuclear Regulatory Commission on March 22, 1979, to shut down five nuclear power plants in the eastern United States because of questions about the ability of their piping systems to withstand earthquakes.

Shortly before those orders were issued, it became apparent to NRC staff that analysis techniques which had been used in the seismic design of safety-related piping for these five plants were not in accord with proven and generally accepted engineering practice. The result could be overstressing of piping and supports for earthquakes which could reasonably be expected to occur during the lifetimes of these plants. The eastern United States is generally believed to be a region of low seismicity, when compared to the western part of the country, but is not without significant historical seismic activity. Attached is a map showing the location and intensity of earthquakes that have occurred in your region.

Some of the piping systems involved could, if failure occurred, cause loss of coolant to the nuclear reactor. In addition, systems needed to shut the plant down safely in that event could also be affected. Thus, an earthquake of not extremely low likelihood would have the potential for causing an accident and for preventing operation of safety systems designed to cope with the accident.

Our objective is to review the situation in an expedited and disciplined manner so that these plants can be returned to operation with assurance that this will not constitute a threat to the public health and safety.

Sincerely,

Harold R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
Earthquake Maps for Southern Maine
and Northern New England

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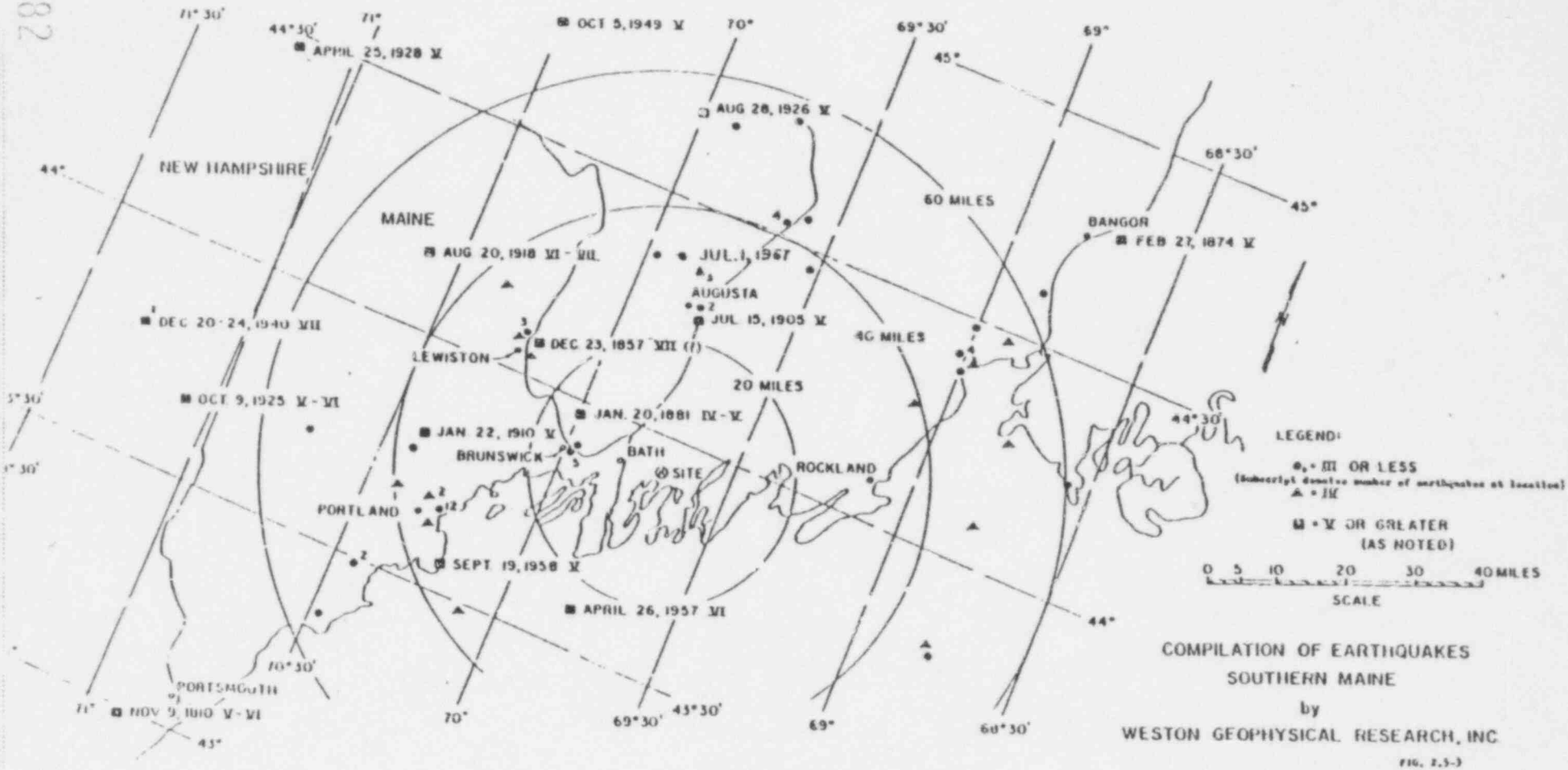
286 242

286 282



COMPILATION OF EARTHQUAKES
SOUTHERN MAINE
by
WESTON GEOPHYSICAL RESEARCH, INC.

FIG. 2.5-3

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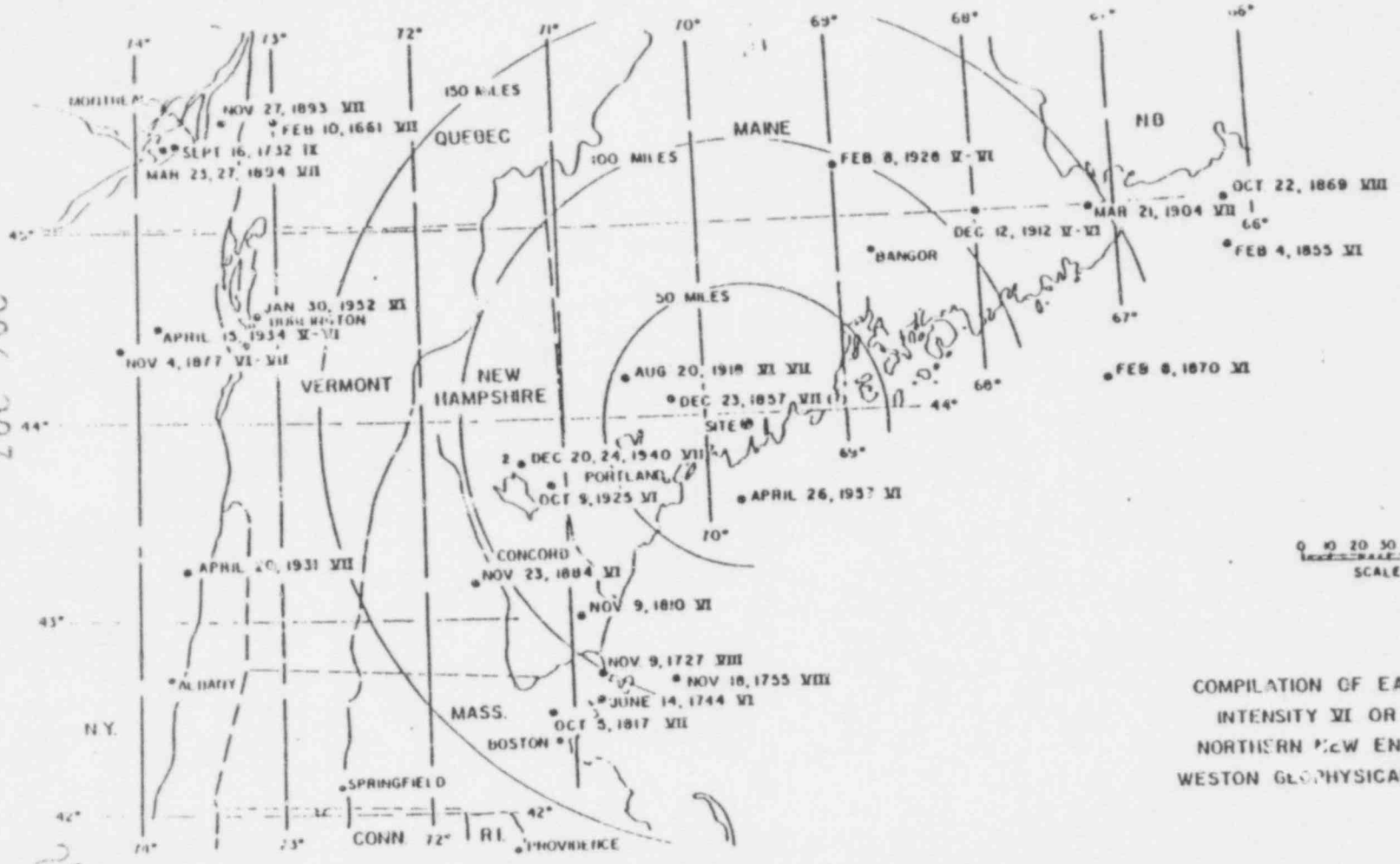

COMPILATION OF EARTHQUAKES
INTENSITY VI OR GREATER
NORTHERN NEW ENGLAND
WESTON GEOPHYSICAL RESEARCH, INC.

FIG. 2.3-3

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