



Consumers  
Power  
Company

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February 16, 1983

Harold R Denton, Director  
Office of Nuclear Reactor Regulation  
US Nuclear Regulatory Commission  
Washington, DC 20555

MIDLAND NUCLEAR COGENERATION PLANT  
MIDLAND DOCKET NOS 50-329, 50-330  
SEISMIC MARGIN REVIEW REPORT  
FILE: B3.7.1 SERIAL: 21047

ENCLOSURE: VOLUME VI-BORATED WATER STORAGE TANK AND FOUNDATION  
(25 COPIES)

REFERENCE: LETTER FROM J W COOK TO H R DENTON, SERIAL 21010  
DATED FEBRUARY 4, 1983

As an attachment to our letter, Serial 21010, dated February 4, 1983, we submitted the criteria for the Seismic Margin Review, Volume I, for the Staff's review and it was subsequently discussed in a meeting on February 8, 1983 in Bethesda. The firm of Structural Mechanics Associates (SMA) of Newport Beach, CA, under the direction of Dr R P Kennedy was entrusted the task of performing the Seismic Margin Review per the criteria in Volume I. Volume VI, dealing with the evaluation of the seismic margins on the borated water storage tank and its foundation, are submitted for the Staff's review as an attachment to this letter.

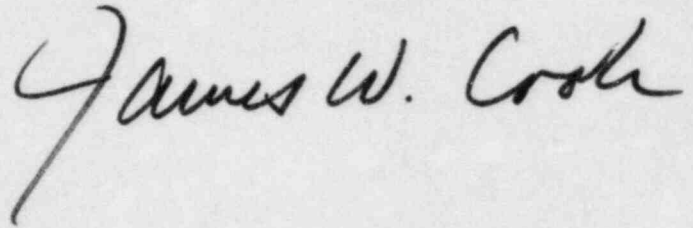
Volume VI of the Seismic Margin Review report titled, "Borated Water Storage Tank and Foundation" describes in detail the method of analysis and the resulting seismic margins. The method of analysis used and the resulting seismic margins have been presented by Dr R P Kennedy earlier in both the ASLB hearings for seismic issues in Midland on December 14, 1981 and in the ACRS subcommittee meeting in Midland on May 20, 1982. The margin evaluation for this structure demonstrates that in all cases, the conservatively established margins are greater than 1.43 with respect to code allowables.

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Future volumes of the Seismic Margin Review report dealing with structures and systems will be submitted as they become available.

A handwritten signature in cursive script that reads "James W. Cook". The signature is written in dark ink and is positioned to the right of the distribution list.

JWC/BFH/bjb

CC RJCook, Midland Resident Inspector  
RHernan, US NRC (3)  
FRinaldi, NRC  
GBagchi, NRC  
RBosnak, NRC

SMA 13701.05R003 (VOLUME VI)

MIDLAND SEISMIC MARGIN EARTHQUAKE  
STRUCTURAL EVALUATION

BORATED WATER STORAGE TANK AND FOUNDATION

prepared for  
CONSUMERS POWER COMPANY  
Jackson, Michigan

November, 1982



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