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9-26-66 4-22 PM

DOCKET NO. 50-155  
File Copy (suppl)

TO - DR. PETER A. MORRIS' DIRECTOR  
DIVISION OF REACTOR LICENSING  
UNITED STATES ATOMIC ENERGY COMMISSION  
WASHINGTON' D.C.

ATTENTION - MR. JAMES SHEA

IN RESPONSE TO QUESTIONS FROM MR. JAMES SHEA IN A RECENT  
TELEPHONE CONVERSATION RELATIVE TO PROPOSED CHANGE NO. 10' DATED  
JULY 29' 1966' FOR OUR BIG ROCK POINT NUCLEAR PLANT' LICENSE  
NO. DPR-6' DOCKET 50-155 - THE FOLLOWING ADDITIONAL INFORMATION IS  
SUBMITTED -

1. THE TIME CONSTANT VERSUS FUEL ENERGY CONTENT RELATIONSHIP USED  
IN THE PREVIOUSLY SUBMITTED CALCULATIONS IS AS FOLLOWS -

FUEL ENTHALPY CAL/GM	TIME CONSTANT SECONDS
150	1.0
200	0.3
250	0.1
300	0.075
400	0.042
500	0.024
600	0.0135

2. FROM AWL PELLET FUEL TESTS CEN-208 AND 209' A MINIMUM OVERALL  
TIME CONSTANT - AT FUEL ENTHALPY OF 425 CAL/GM - OF 0.260 SECOND  
HAS BEEN CALCULATED AS COMPARED TO 0.050 SECOND FOR POWDER FUEL.  
THIS LONGER TIME CONSTANT FOR PELLETS WOULD DECREASE THE RATE OF  
HEAT TRANSFER AND HENCE THE PRESSURE RISE' THEREBY DECREASING THE  
PROBABLE CONSEQUENCES OF THE ASSUMED ACCIDENT.

R. L. HAUETER  
ASST ELECTRIC PRODUCTION SUPT - NUCLEAR

8701190539

END RM

2743

FROM: **Consumers Power Company**  
**Jackson, Michigan**  
**(R. L. Hanster)**

TO: **Dr. Morris**

CLASSIFICATION: **U** POST OFFICE REG. NO.:

DESCRIPTION: (MUST BE UNCLASSIFIED)  
**IAI responding to questions from Mr. J. Shea in a recent telecon relative to Change #10 (proposed) to Lic. DPE-6... re time constant versus fuel energy content relationship; pellet fuel tests.....**

REMARKS: **Mail Room Distribution:**  
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**2-compliance**

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<b>Boyd:</b>	<b>9-27</b>			
<b>w/all extras - FOR ACTION</b>				
<b>Dr. Morris:</b>	<b>9-27</b>			
<b>w/info cy.</b>				
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