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MEMORANDUM FOR:           Richard H. Vollmer, Director, TMI Support

FROM:                       John T. Collins, Deputy Director, TMI Support

SUBJECT:                   TMI ACCIDENT - HIGH TEMPERATURE READINGS FROM CORE THERMOCOUPLES

Reference:                 Memo from Bernie Snyder, OPE, to Commissioner Gilinsky, September 27, 1979

I have reviewed the above mentioned memo from Bernie Snyder regarding temperature readings from TMI-2 core thermocouples. It is understood that some readings were reported to be as high as 4000°F during the time the core was assumed to be uncovered. From the information obtained from the National Bureau of Standards and from R. Shepherd, Program Manager, I&C Division, true temperature indications above about 2700°F are physically impossible for Cr-Al thermocouples (the type employed at TMI). The real limitation being that this type of thermocouple has a melting point slightly above 2700°F. A number of possibilities were presented for the high readings, all of which would falsely indicate high temperatures.

John T. Collins, Deputy Director  
TMI Support

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