

October 24, 1989

Commissioner Kenneth Carr
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Commissioner Carr,

Can you explain why your subordinates are calling the sinter-cake found in the damaged Three Mile Island-2 reactor "previously molten material"? (See the cover of Nuclear Technology, Volume 87, August 1989.)

Don't nuclear engineers, officers graduated from naval reactor school, and licensed reactor operators get taught that the UO_2 fuel pellets for power plants are sintered to 95% density at temperatures below 1800 C ?

May I suggest that the government reprint Jack Belle's book on "Uranium Dioxide". Then, perhaps, the next generation of scientists will be able to read how UO_2 can be sintered in steam at temperatures as low as 1200 C. They won't waste tax dollars looking at the effects of water-quenched sinter-cake upon lower pressure vessel steels.

Sincerely,

Walston Chubb

Walston Chubb P.E.(ret.)
3450 MacArthur Drive
Murrysville, Pa. 15668

412-327-8592

cc. Secretary James Watkins
Rep. Don Ritter
NUMARC

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PDR ADUCK 05000320
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