

Interrogatory for Professor Terry Carlton,
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1. What education do you have?
2. What courses have you taught?
3. What is your current research interest?
4. Do you feel competent to give an opinion of the thermodynamic considerations used by the Mark II Owners Group for the calculations of oscillations in a pressure containment system designed for explosive release of steam due to a loss of coolant accident in a boiling water reactor assuming the Mark II Owners Group showed you their work?
5. Would thermodynamic considerations be used in such an analysis?
6. Are you competent to discuss the thermodynamic considerations?
7. ~~XXXXXX~~ If you are familiar with the French physical chemist, N. Prigogine, and the physical chemist of Georgia Technical Institute, Fox, have you seen Fox's critique in the Proceedings of the (United States) National Academy of Sciences? What thermodynamical ~~xxx~~ equation is involved in their argument?
8. Are you familiar with the Ising model of transport in boiling water processes?
9. What are some of the regimens that boiling water can exist in, from a thermodynamic point of view?
10. Are you familiar with any of the theory of the thermodynamics of cavitated surface bubble formation of super heated water and metal interface?
11. Assuming you have seen the thermodynamic equations of the Mark II Owners Group ~~I~~ are there any errors or typographical errors that you have observed?
12. Is it within your expertise to calculate the resonant frequency of a ~~xxxxxxxxxxxx~~ reinforced concrete suppression pool?
13. If so,
 - A) For what length of time ~~xxxx~~ ^{is} an explosive steam venting through given dimensional pipes into the given dimensional suppression pool finally corrosive to the structure at the resonant frequency of the pipes-suppression pool structure?
 - B) What might be some effects from resetting the concrete of such a structure? Of pinning the concrete with additional steel beams?
 - C) If the Zimmer Power Station - Unit 1, Moscow, Ohio Mark II suppression pool has been reinforced with steel beams, do you find an account of the transverse resonant vibration of the reinforcing steel beams? If so, is the account reconciled with the resonant frequency of the blow down pipes for enucleate boiling? What ~~xxx~~ ^{other} boiling regimes are possible and have their resonant frequencies in the blow down pipes, ^{been} insulated in design capability ~~xx~~ ^{from} the suppression pool and its reinforcing structure theoretical resonant frequencies?
14. What is the problem in not having an ionic strength analyzer (conductance probe) at the lowest point of the interior of a reactor vessel containing zirconium, a 1500° F temperature, and boric acid? Are there any free radicals of zirconium and boron that mimic electrolytes in water?
15. Who would you consider competent to answer question #4? #5? #8? #9 ? #10? #11? #12? #13? #14?
16. Ought not every power cable and control ^{cable} be identifiable as to efference and afference at any point of its length? Ought not the ampacity of each power cable and control cable be known for any phase of plant operation?