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Steven C. Sholly  
304 South Market Street  
Mechanicsburg, PA 17055  
4 September 1979

Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Sir:

On 20 August 1979, I petitioned the NRC to intervene in the proceedings regarding the Three Mile Island Nuclear Station which are tentatively scheduled for February 1980 before the Atomic Safety and Licensing Board. In my letter of 20 August, I indicated that the contentions which I submitted were subject to change upon my receipt of additional information. I hereby submit a more definitive list of contentions regarding the above-mentioned proceedings, a copy of which is hereto attached.

Having read more about the proceedings and the manner in which intervenors are to be evaluated, I am detailing my interest in this proceeding and how this interest may be affected by the decision of the ASLB regarding Three Mile Island Nuclear Station. My interests in this case are enumerated below:

- A. I live with my wife and daughter in the Borough of Mechanicsburg; our residence is approximately 12-13 miles from the TMI site. This is close enough to the plant that we may be required to evacuate or take other protective measures in the event of a future off-site release of radiation from TMI. We did in fact evacuate during the March 28 incident due to our proximity to the plant, confusing reports of radiation levels being measured in the area, and the fact that my wife was five months pregnant at the time of the accident. Our daughter, born in mid-July, is a mosaic mongoloid; it is possible that our proximity to the plant could have had an impact on this occurrence of Down's Syndrome. In addition, the future health and safety of myself and my family could depend on the decision of the ASLB regarding TMI.
- B. All of the places my wife, daughter, and I normally travel to in the process of daily living are within 15 miles of TMI. My daughter's baby-sitter lives in New Cumberland, some 10 miles from the plant. Our grocery store, drug store, department store, service station, and many of our friends and relatives all are within 15 miles of the plant; my sister Kim lives within five miles of the plant. The health and safety of my family must not be compromised just because we happened to be visiting my sister in the event of a future accident or off-site radiation release.

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- C. I work at the Derry Township Municipal Authority's Wastewater Treatment Facility which is located just off Airport Road in Hershey. The plant is about eight miles from where I work. My travel route to work takes me across the South Bridge or the Penna. Turnpike Bridge; the former is 10 miles from the TMI plant, the latter is about 7 miles distant from the plant. From publicly available data located at the State Library in Harrisburg, I have determined that I was in the middle of the radiation plume from the TMI accident from the 28th to the 30th of March. This plume is listed as giving radiation exposures of one millirem per hour of gamma radiation; no figures for beta exposures were given. I estimate that I received approximately 20 millirems of radiation exposure during the hours I was at work on the three days mentioned above. This is far in excess of the maximum annual dose at the plant boundary permitted by NRC regulations (5 millirem/year). Our plant was at no time notified that we were in the radiation plume. The closeness of TMI to my place of work could place me in a hazard to my health and safety in the event of a future accident. In addition, I would be separated from my wife and child in the event an evacuation is ordered while I am at work.
- D. I participated in the original ASLB hearings for TMI Unit 1 as a limited participant because the date for intervenor filings had passed when I learned of the proceedings. As a limited participant, I was excluded from asking questions, calling witnesses, requesting vital information under discovery process of the hearings, and was not able to get any response from the ASLB to numerous issues raised in my more lengthy written statement which was submitted. This written statement dealt with issues which came into the forefront of the TMI accident discussions and hearings recently. Some of the issues I raised were the adequacy of radiation monitoring in the area, the adequacy of evacuation plans, the susceptibility of the plant to long unplanned outages, and the susceptibility of the plant to sabotage and terrorist activity. I need to be admitted as an intervenor in the new proceedings in order to raise the issues again and to have my concerns addressed in a formal, legal manner. Any other type of participation limits my ability to pursue these and other issues and as such is an unconstitutional limitation on my rights as described in the Constitution and Bill of Rights. 1128 033
- E. It is obvious that many statements made by witnesses in the original ASLB hearings were inaccurate in the light of the March accident at TMI. The only manner

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in which I may attempt to find out the facts in the issues raised and those to be raised at the new hearings is to become a full participant in those proceedings as an intervenor.

- F. My future choices as to place of residence, place of employment, and whether or not to purchase a home will be directly affected by the outcome of the ASLB's decisions.

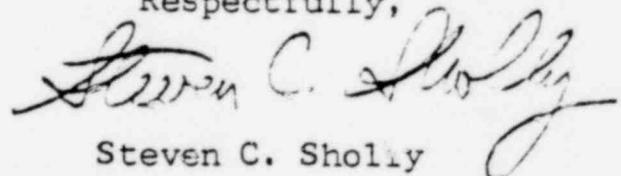
I await confirmation as an intervenor in the TMI proceedings before the ASLB. In the mean time, I request that I be sent copies of the following documents in order to prepare for the ASLB hearings:

1. A copy of the Final Environmental Impact Statement for Three Mile Island.
2. A copy of any NRC report regarding the accident at TMI.
3. A copy of the Commissions Rules of Practice regarding nuclear powerplant licensing and ASLB hearings.
4. Information relative to the possibility of obtaining funding for use by intervenor groups and individuals in ASLB proceedings.
5. Copies of testimony given by NRC officials at public hearings about the TMI accident.

I wish to be placed on the NRC's mailings list for News Releases, Safety Guides, and other publicly available mailing lists as may be relevant to the TMI plant and associated activities throughout the nuclear fuel cycle.

I may be reached at work at (717) 566-3237, (717) 566-3238, or (717) 566-3269. I may be reached at home at (717) 766-1857. I may also be reached at my home address contained in the heading of this letter. Should the Commission require additional information from me, I shall be glad to provide this information.

Respectfully,



Steven C. Sholly

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REVISED LIST OF CONTENTIONS IN THE TMI PROCEEDINGS BEFORE THE  
ATOMIC SAFETY AND LICENSING BOARD

SUBMITTED BY STEVEN C. SHOLLY  
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100. The plant does not have a suitably large and readily controllable exclusion area. Part of the TMI exclusion area extends into the Susquehanna River where the Operators of the plant have no legal right to restrict public access under applicable law. The Operators of the plant have no adequate control over public access to the exclusion area and have no legal right to establish such control in the exclusion area as currently defined. The plant exclusion area must be redefined to bring it into compliance with the law and the control which the plant Operators have over this area must be demonstrated to be swift and effective in the event of a site emergency so as to avoid unnecessary and/or unlawful exposures of the members of the public to radiation.
101. The plant is located in an area with a sufficiently high population density so as to preclude safe and effective evacuation from the area of the plant in an emergency. Specifically, the area within ten miles of the plant cannot be evacuated in a reasonable amount of time so as to assure that members of the public are not placed in danger to life and limb by an accidental release of radiation. The Operators of the plant have no effective, publicly available, practiced, well-publicized evacuation plans whatsoever and this also precludes effective evacuation of residents and members of the public in the area of the reactor in the event of an accident. Evacuation plans which could safely and effectively evacuate the population within ten miles and other distances depending on the severity of an accident must be developed, proven to work, be publicly available, and practiced sufficiently to permit familiarity with the plan by the public before the plant can reopen. 1128 035
102. The limitations of 10 CFR Part 20 and 10 CFR Part 50 cannot be met by the plant as constructed. The facility and operational procedures must be modified to the extent necessary to permit the plant to comply with 10 CFR Part 20 and 10 CFR Part 50 under any condition of operation, including all possible accident, cleanup, fuel handling, and/or routine operational conditions.
103. The primary cooling system, the emergency core cooling system, and the reactor containment building are not designed and built to provide reasonable assurance that these systems will function properly under accident conditions. As presently designed and constructed, the operation of the plant presents an undue and unnecessary risk to public health and safety due to the inadequacy of the core cooling systems to prevent damage to the reactor and the inability of the containment building to contain radiation which might be released in an accident. The plant must undergo redesign and reconstruction and/or modification to the extent necessary to provide reasonable

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assurance that the core colling systems and the reactor containment building will function to protect the public health and safety under all conditions of operation.

104. The auxiliary building as designed and constructed and operated presents an unreasonable risk to radiation exposure for the members of the public in the area of the plant. The fact that large amounts of radiation escaped from the Unit 2 facility is evidence that the auxiliary building does not function and is not operated so as to preclude the danger described above. The auxiliary building must be redesigned and modified and its operational procedures must be rewritten so as to prevent large radiation releases in the event of certain accident conditions. One possible solution to this problem would be the construction of a containment building around the auxiliary building; this would be entirely acceptable as a solution to the radiation release problem.
105. The Final Environmental Impact Statement and the Final Safety Analysis Report are rendered factually invalid in many respects by the accident at TMI Unit 2 and must be rewritten; the FES must be republished in a revised form for public and agency comment before a new FES can be issued. The facility cannot be permitted to resume operation until the requirements of the NEPA review process are satisfied to the letter. All sections in these two documents dealing with plant instrumentation, radioactive environmental monitoring programs, evacuation of the public in time of emergency, environmental impacts of accidents (especially Class 9 accidents), the cost-benefit analysis of the plant, the financial ability of the Operators to continue to operate the plant in a safe manner, and radioactive waste disposal must be reworked to reflect the realities of the situation in the post-TMI-accident framework.
106. The lack of specific decommissioning plans for the reactor and the obviously spiralling costs for any such plan render any cost-benefit ratio thus far calculated for the plant invalid. Such decommissioning costs and the environmental impact of such an action must be evaluated in the NEPA review process. The plan of decommissioning must be revealed and available for public inspection for analysis of cost and environmental impact before the plant can be allowed to restart commercial operation.
107. The environmental impact of the plant with regard to activities associated with the nuclear fuel cycle has not been evaluated and this is a direct violation of the NEPA review process. The parts of the nuclear fuel cycle which must be discussed include environmental impacts due to mining uranium used for fuel, reprocessing spent fuel rods, radiation exposures and health effects due to these exposures from uranium mill tailings, processing of ore into fuel pellets and fuel rods, and disposal of radioactive wastes generated at all steps in the fuel cycle. These impacts must be evaluated in the NEPA review process before the plant can be permitted to resume commercial operation.

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103. The design of the control room and other instrumentation and monitoring devices is seriously deficient from a human factors engineering standpoint. These design flaws prevent the Operators from controlling the operations of the reactor in such a manner as to protect the public's health and safety under all conditions of operations, especially under accident conditions. The design of the control room and other instrumentation used to control the reactor and associated systems must be reevaluated from a human factors engineering standpoint and necessary modifications must be made to ensure adequate operational control on the part of the Operators before the plant can be permitted to resume commercial operations. Additional instrumentation which would permit more accurate and readily available information on the status of the reactor and associated systems must be installed and demonstrated to perform adequately before the plant can be restarted into commercial production of electricity.
109. The environmental radiation monitoring program for the plant is not adequate to ensure timely and accurate dose information during radiation releases to off-site areas within 50 miles of the plant. Such information is vital in determinations of the necessity for evacuations and/or other protective measures in the event of off-site releases of radiation. The present program does not permit such dose estimates to be made. Beta, gamma, and specific radionuclides such as I-131, Pu-239, Sr-90, and Kr-85 must be monitored at a large number of sites at varying distances from the plant and in all compass directions in order to ensure that sufficient information is available for public officials and private citizens to be decisions upon regarding public health and safety. Radiation release information and dose estimates must be made public in timely manner to ensure that decisions can be made in time enough to protect the public from unnecessary radiation exposures. A new environmental radiation monitoring program must be instituted in order to protect public health and safety. This new program must not be totally under the Operators control to avoid the possibility information could be deliberately withheld from the public. The analysis of the data must be handled independently from the Operators to further ensure that the public and public officials can trust the accuracy and timeliness of the information which is received. The new program must be in operation and proven to function adequately before commercial operations can be permitted to resume.
110. Repeated violations of NRC and other legal requirements related to the operation of the plant indicate that there is substantial doubt that the facility can be operated in a safe manner so as to protect public health and safety at all times. Until such time as this can be determined, the operating license of the plant must be revoked. The public must be protected against violations of the law which result in unnecessary radiation exposures. With a maximum fine of \$25,000 for violation of NRC regulations, there is very little in the way of a utility to continue to violate the permit conditions and laws under which it operates a nuclear power plant; a stiffer system of fines and more vigorous enforcement of regulations must be established in order to ensure that the public is adequately protected against unlawful actions by the Operators. This must be accomplished before operations resume.

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111. The technical capabilities of the Operators' staff is not sufficient to permit adequate protection of the public health and safety under all circumstances of operation. The Operators must acquire a sufficiently skilled staff before commercial operations can resume.
112. Site security is grossly inadequate to protect the public from the possible sabotage of the facility. This includes internal as well as external sources of sabotage. This poses an undue and unnecessary risk to public health and safety. The security force and procedures at the plant must be improved in order to adequately protect the public health and safety from the potential impacts of a terrorist sabotage attempt on the plant. The guards at the plant must be capable of repulsing an armed attacking force of up to 15 persons who are armed with explosives and automatic weapons and who may have inside assistance in their efforts. A new security system must be in effect and well-established before commercial operations can be permitted to resume.
113. Communications between the NRC, the Operators, the public, and government officials during accident conditions are grossly inadequate to protect the public health and safety. Instant and totally reliable communications must be available between the Operators, the NRC, the Governor's Office, and the Bureau of Radiological Health of the Department of Environmental Resources must be available on short notice before the plant can be permitted to resume commercial operations.
114. Certain structures which can under accident conditions can contain significant quantities of radiation are not adequately protected against damage by missiles, especially large commercial and military aircraft which use Harrisburg International Airport. Such aircraft include the Boeing 747 and the C-5A military transport plane. All plant structures which could contain dangerous quantities of radiation under any condition of operation must be hardened to withstand the impact of these large aircraft before commercial operations can resume.
115. The financial and corporate structure of the Operators is not adequate to insure safe and continued operation of the plant in a manner so as to protect the public health and safety. The financial resources and the corporate structure of the Operators must be improved to the extent necessary to permit safe and effective operation of the plant before the plant can be permitted to resume commercial operation.
116. It is not possible to evacuate all members of the public on a timely basis in the event of an accident occurring under adverse weather conditions. Until the Operators can design a plan which will satisfy evacuation requirements under all conditions of weather encountered in the plant region, the plant cannot be permitted to operate.

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117. The lack of a sufficiently effective system for eliminating explosive gases from the reactor vessel and the reactor containment building during certain accident conditions poses the real threat of the ultimate catastrophe--a core meltdown. This poses an undue risk to public health and safety. Until a system for eliminating explosive gases from the reactor vessel and the containment building is developed, installed, and tested, the plant cannot be permitted to resume commercial operations.
118. Until it is proven that the costs necessary to modify the plant to bring it back into safe commercial operation are less than the costs of decommissioning and the creation of power from alternate sources or the saving of power through conservation, the plant cannot be permitted to resume commercial operations.

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