

Mary Helen

Date: April 1, 1979

To: PET

Fm: Rich

Re: Nuclear Energy Option

I have spent the entire weekend monitoring the situation at Three Mile Island and doing some sober thinking about nuclear energy in general.

As we agreed on the phone, I believe that your basic position in the next few days ought to be that this event triggers a total reevaluation of your position on the role of nuclear energy and that it ought to trigger a full reevaluation by the government not only of the safety regulation process, but of the role of the nuclear option in the future mix.

Mo Udall has already said that he hopes we won't go any deeper into the "nuclear swamp".

### The Accident

1. The series of mishaps, miscalculations, delays and misinformation lends a new credibility to the position of groups like the Union of Concerned Scientists that you simply cannot adequately foresee all possible events. One would like to ask Dr. Rasmussen what, using his fault trees, would have been the likelihood of the Three Mile Island accident occurring.
2. As I write this at Noon on Sunday, the situation is about what it has been for most of the last 24 hours. The plant is cooling down very slowly. The big concern at this stage is the hydrogen bubble. There has been conflicting information about whether it is getting larger or smaller, and the oxygen content which is critical in terms of whether it is likely to explode. At some point early this week, probably not until Wednesday, they will attempt to vent the bubble into the containment and then draw it out into what is called a "hydrogen recombiner". This will be the crisis time which will have the highest risk of an explosion. Should the bubble explode, there is some doubt as to whether the containment will be able to withstand it.
3. One of the serious questions, as I understand events is the level of cooperation of the licensee with the NRC and the State of Pennsylvania. The NRC has not been willing to take over control of the reactor because of the liabilities involved. Certainly the aftermath of all of this ought to initiate a much tougher regulatory control with NRC personnel at all plants and a rewriting of the Price-Anderson Act.

4. Noone is yet sure whether this accident contains generic elements which will necessitate the shutting down of other plants of similar construction. (This plant is a PWR constructed by Babcock and Wilcox).
5. Two additional questions in my mind are: (a) Is it a failure of NRC's regulations or the response of the licensee which led to the delay from 4 AM when the event occurred to 7:45 when the NRC was notified. One would think that regulations would require the utility to notify the NRC as soon as any reactor was "scrammed" as Three Mile Island was soon after 4 AM. (b) What explains the tone and degree of assurances expressed by the NRC and Chairman Hendrie at the Interior Committee briefing on Thursday in light of subsequent events? Remember that the Chairman indicated that the core would be below boiling point in a matter of hours.

### Nuclear Energy in General

Some general thoughts, not necessarily in the order of importance.

1. Doesn't this incident, given the number of failures involved indicate that the engineering problems inherent in a system as complex and dangerous as nuclear power is beyond human capability. Of course, the industry will claim, as it always does, the reverse. Assuming, God willing, that the core does not melt down and the bubble does not explode, and we have no massive loss of life, they will say that this indicates how safe nuclear power is. They will point to the extent and complexity of the accident and say that even given this unanticipated accident, noone was harmed. In fact, Ralph Lamm, one of the big names on the pro-nuke side was already arguing this in a debate with Robert Pollard on the CBS special the other night.
2. Even given the total energy crisis, can you, in light of your basic position vis a vis what we leave behind for future generations, continue to view nuclear power as a part of the "necessary energy mix." I would think that at very least, we must make a new effort based on new assessments of risk, to formulate an energy policy which excludes nuclear power.
3. I strongly believe that your current position on the construction of the Pilgrim II plant is untenable. At the very least, you should remain neutral until the NRC issues a construction permit.
4. In fact, we should examine three major alternatives in light of this event:
  - a. A moratorium on new plants while a full scale government re-examination takes place.



- \* b. Suspending the construction of all plants in progress, particularly those at early stages of construction.
  - c. The possible shut down of nuclear power. Clearly, this alternative may be impossible in terms of the realities of demand and reliance on nuclear power, particularly in areas like New England.
5. Regulation is clearly inadequate. The reliance of the NRC on licensee notification, personnel, information and cooperation at its present levels is intolerable. The system works on the threat of NRC evaluation and action after the fact. Given the corporate interests of the utility, it has always been likely that they would want to minimize any occurrence. The experience at Three Mile Island appears to, and I am convinced to proven to have, demonstrated this proposition to a dangerous extent.
  6. Evacuation preparedness must be upgraded.
  7. It seems clear that the public perception of the potential dangers inherent in nuclear power is even less than expected. It is ironic that this incident occurs at a time when the public consciousness is being raised by the movie the China Syndrome. (By the way, you should see the film).

#### POLITICAL IMPLICATIONS

1. I needn't tell you, but at risk of belaboring the obvious-- YOUR FIRST PUBLIC STATEMENT MUST NOT BELITTLE WHAT HAS OCCURRED AND MUST AT LEAST INDICATE THAT YOUR PRIOR POSITION IS SUBJECT TO A COMPLETE CHANGE.
2. Whatever you say will take place in a new heightened environment of public interest and concern about nuclear power. YOUR POSITION AT THAT TIME WILL BE PLACED IN CONCRETE IN A WAY THAT ALL OF WHAT YOU HAVE SAID IN THE PAST ABOUT NUCLEAR POWER NEVER HAS. FOR THAT REASON WE SHOULD BE EXTRAORDINARILY CAREFUL.