

Date: May 30, 1979

Occupation: Computer Systems Analyst

INTERVIEWER: When did you first hear about Three Mile Island?

NARRATOR: The Wednesday morning that it happened at around 10 o'clock in the morning.

INT: Who did you hear it from?

NAR: The building superintendent at my business.

INT: Did you talk about it with him?

NAR: No I just overheard him saying about it to one of his superiors.

INT: Do you remember what he said?

NAR: There's been an accident at Three Mile Island,

INT: Well that means that you must have known what Three Mile Island meant before this?

NAR: Oh, yes.

INT: Okay, so you were aware before this that there was a nuclear reactor on Three Mile Island?

NAR: Oh yeah.

INT: Okay. So you just perked up when you heard that?

NAR: Yes, I did.

INT: Did you talk to him then?

NAR: I tried to get, some, I asked my supervisors and their supervisors for information on it and didn't get any.

INT: Did you then go further seeking information?

NAR: No

INT: What did you do? Just forget it at that point? I mean did you think it was serious at that point?

NAR: Um, no.

INT: So you sought of heard something that got your attention but it . .

NAR: I had the impression that it was really not an ongoing kind of problem. I thought it was like an isolated, finished, kind of thing. I thought that it already happened and done with.

INT: Did your opinion change on that?

NAR: When I heard?

INT: Well, later, did your attitude toward that change?

NAR: I went to work the next day, Thursday and I was, don't, I had heard I think Wednesday and Wednesday night I had heard conflicting reports about it.

INT: Where?

NAR: On the radio.

INT: Okay. So you heard more media presentation of it?

NAR: Just a bit.

INT: But you still weren't really attentive?

NAR: No, I was attentive but I had no idea whether it was, the way it was described as there had been a release of gas, of radioactive gas. And from the descriptions it sounded like it was isolated kind of incident, which angered me but I thought it was already done with. And I can't remember whether it was Thursday, I remember clearly Thursday night, debating with friends whether I should go into work because work was fairly close.

INT: Where is it?

NAR: What do you mean where?

INT: Where is your work location?

NAR: In Harrisburg.

INT: Okay. So you're how much closer?

NAR: It was about 7 miles. Where I work is between 6 and 7 miles from the reactor.

INT: And where are we here? Where do you live?

NAR: About 22 miles I guess it is.

INT: So you were debating on Thursday whether to go down to work?

NAR: Right, Thursday evening whether to back into work Friday. In fact, I felt that if it had been just entirely up to me I wouldn't have gone in but I felt enough pressure from people at work, from my supervisors and stuff that I felt I ought to go in.

INT: Was that direct or internal?

NAR: Oh, it was internal, nobody had said anything yet.

INT: Okay you just thought you felt a sense of responsibility or, if not responsibility some obligation...

NAR: I felt the normal kind of responsibility you feel for a job that you should show up if possible. In fact, if I, am sometimes in the habit of bringing home work with me to do on my own time. If I had had, if I had brought work home with me Thursday night, I'm fairly certain I wouldn't have gone to work Friday because I would've felt like I could work and do it here.

INT: Work here and so forth.

NAR: Right, but since I didn't bring work home I didn't do that.

INT: Still, by Thursday you weren't feeling it was a crisis situation?

NAR: I was, by Thursday evening I was feeling very unsettled about it.

INT: On Thursday evening, you had gone to work Thursday

NAR: Yes, I went to work then.

INT: Was there more talk then?

NAR: No, as a matter of fact, I remember remarking to my friends that although there was some consternation Wednesday, some people had were so curious about it and a little bit anxious, Thursday nobody that I heard in the entire place, which is always about 300 people, nobody that I hear in the corridors or any place else, even mentioned it.

INT: You said you were remarking that to your friends, were they at work?

NAR: No.

INT: What friends were you talking about?

NAR: At home

INT: And would you like to talk about who you were talking with this?

NAR: No, well I don't remember really,

INT: Just people you see around your home rather than at work?

NAR: My friends, yeah my friends from Carlisle, people, connected with the college. I was remarking to them that nobody at work even said anything about it Thursday.

INT: Were you into work again on Friday?

NAR: I went into work Friday morning, feeling very uncertain about it, though I'm not certain that I had gotten anymore news but it's interesting that the first inkling I had of it Friday morning, that there, that it was getting more serious, or that there was something more serious going on was that I remarked to myself that I had just heard two different people make remarks about Three Mile Island, where as the day before nobody else had.

INT: This is when you were at work?

NAR: Friday morning.

INT: Early when you went in?

NAR: Yeah, sometime around 9 o'clock. I noticed that two different people different parts of the building had been talking about that, and this struck me as very strange since the day before, nobody had said anything. About an hour after that I noticed some very strange behavior on the part of the building superintendent who was listening to a I think a police radio. And would not let me in his office, I had some business to conduct with him and he wouldn't let me in his office, waved me away like he was involved with a very serious. And all the top level management in the building were running around you know, looking like they were very confused, and in a lot of places people were not working but just listening to the radio. That was around 10 o'clock.

INT: This was at work?

NAR: Yeah, at work in Harrisburg.

INT: And they had the radios on?

NAR: A lot of people had radios.

INT: Were they grouping around them?

NAR: Yes, people were standing, nobody was getting any work done, people were just sitting around listening to the radios. And at that point I just decided to leave because, I heard in in the space of like 5 or 10 minutes I was listening to the radio, it became clear to me, that first of all the media had no idea what was going on. And that the reports that they were broadcasting which were direct quotes from the company indicated the company didn't know what was going on. And, given what little I knew about the dangers of atomic reactors, and the way people react in these sorts of situations, crisis situations, I decided that there could be something extremely serious going on. And I decided to leave immediately even though the company management was saying that we should just keep cool, stay in the building, and wait for further instructions. I decided that if . . .

INT: Wait, who was doing this?

NAR: Doing what?

INT: Telling to stay cool and be in the building?

NAR: Management.

INT: How were they telling you this?

NAR: The managers were going around to their employees that they should, oh, they weren't ordering people to stay there.

INT: No, no, no, but they, there was some action taken?

NAR: That the official, the official line at that time, the official action the bank was taking was to, you know, people should where they stay in the building, in fact the president of the bank, had been called by the governor's office. Somebody in the governor's office, and was advised that he should keep his people all in and this includes people in many different buildings, all around the area, different branches and different administration buildings. To keep them inside because that was determined at that point that there was you know, if there was any danger all the people would be safer inside, right, and that we should wait until we have further notice. And I just decided at that point that if say three hours later it was decided that you know, everybody to leave, than there would be enormous traffic jams and probably a great deal of hazard on the road, so I just decided that you know, I wanted to leave.

INT: So you were kinda of getting away before you, there was seemed to you to be an imminent problem?

NAR: Yeah it seemed to me to be a potentially disastrous kind of hazard, and I had no idea how serious it could be and I didn't trust anybody at all. Because like you know, it was obvious what the politics and the pressures of the decision makers are. And that, I

mean just in light of that became clear to me that I you know, I had to act in my own interest. Because nobody else was gonna.

INT: Okay. I'm gonna hold you up in a bit because you, we have a series of questions about that later, but, I'm trying to get you to go through chronology at this point,

NAR: Oh, I see.

INT: No, I'm not, I'm not fighting it. Okay so than you left work.

NAR: Well, it wasn't easy because I was carpooling. I did not have my own car there.

INT: So, what did you do?

NAR: So I tried to convince the fellow that I carpool with that we should both go home, we both live in Carlisle. He was reticent and I felt bad for him because he's a more recent employee and I think that he felt less clear about just upping and leaving. So the official line was that we should stay, and, it's relevant that I didn't have any vacation time coming 'cause I had already exhausted vacation time that was available to me.

INT: So you were there running with a little trouble here too?

NAR: Well I mean, by leaving I was basically putting myself in the position of either losing pay or asking them to do me a special favor. In any case I was doing this you know, without any kind of, just entirely on my own.

INT: But you didn't think about it as being fired?

NAR: No, I don't think it was any real possibility of being fired. But I don't think that would've influenced me because I don't value the job that much, I mean, I don't, and that's probably one of the reasons why they weren't fire me. At any rate, I had to try to convince this guy to drive home with me and he was wavering. I think he was very uncertain about what to do. I think he was concerned also, I think that he was sensitive to the hazards but I think that he's less, he's slightly less assertive than I was in the situation because then I think he felt less comfortable in the work, in the work environment than I did being a more recent employee. But he suggested that if I was real nervous about being there one thing I could do was get some gas in his car, because he didn't have much left and if we had to leave in a hurry, than it probably be hard to get gas, at that point. And he said he'd be willing to leave say in an hour. This, this conversation took place around ten o'clock.

INT: On Friday morning

NAR: On Friday morning. So I went and got gas in the car, and kept my eyes open to see if I saw people on the roads, and stuff like this. I didn't really notice anything at that time that was unusual. The gas station was crowded but that turned out be coincidence. I got gas in the car.

INT: How do you know that?

NAR: Well, just because a half an hour later it was not crowded, I'm fairly certain it was coincidence, it stuck out in my mind, but it turned out to be coincidence. So I went back with the car full of gas and my carpool buddy agreed that. I mean he was, it was difficult

time for time for him to leave because of something that he was involved in at work, and a half an hour later would be a better time for him to leave. So he . . .

INT: Was he involved with other people and later he wouldn't be, or I mean, what made it awkward?

NAR: He was in the middle of, well, he was in the middle of running a test on some computer equipment and if he left it would cause some confusion and he, so I agreed to wait until he was finished. But I couldn't tell really whether he was actually saying he was gonna leave then. I think he was still wavering. I decided at that point that if he was not prepared to leave at 11 o'clock, I was going to take his car and drive it home, since I still had the keys having just gassed it up. So I felt very strongly about it . . .

INT: Getting, about leaving?

NAR: Yeah, and I knew that I could basically bully him into going too and I was willing to. Which is very out of character for me. I was willing to you know, bully him into, say look you know, I'm going to drive the car back if you want to come back with me that's alright.

INT: During this time were you following further reports?

NAR: Um, they're weren't any coherent reports on the radio at the time. People were listening still. This whole time nobody had gotten any work done in our area of the company and it was silly for them to keep people there obviously. Everybody was very concerned, listening to the radio. But there was nothing coherent coming, just repetitions of same confused statements and same speculations

INT: You were worried. What worried you most?

NAR: I think I was worried both that something had already happened, which though not perhaps of catastrophic proportions had already endangered my health, and was continuing to, the longer, I felt that every minute I spent there was making the situation worse for me. And I also worried that some kind of problem was underway, some sort of kind of potential disaster was in the making, which nobody, which was totally out of control, and which the authorities would be totally dishonest about, to the media for very understandable reasons. Because they needed the time to make decisions and so but. Other words, I felt that even if people were acting, even if the authorities were acting in good faith, it could be that the situation was totally out of control and that the public would not be informed for a long time. So I . . .

INT: Go ahead.

NAR: So I felt that I had to, you know. So I felt it was possible that something really disastrous was gonna happen like that would really endanger my immediate health or you know, maybe lead to mass panic and a lot of people being killed in the panic and so forth.

INT: What do you think gave you that signal? That is, you know, you're saying that the radio shows were -what was being presented- were still confused and so forth and so on, what do you think triggered since you did go into work in the morning and everything, what do you think triggered that?

NAR: Triggered my decision to leave?

INT: Yeah

NAR: I think it's basically, it was basically the fact that something had happened on Wednesday of an indeterminate nature and by Friday there was still, it was still not clear what was happening.

INT: Okay, in other words, you're responding to reports that haven't cleared themselves up?

NAR: Right, after three days of something happening that no one was very clear about, or 2½ days, it seemed to me that, I felt the likelihood was small that there would be a catastrophe but I thought that the potential consequences were so serious that acting on a very small likelihood was the thing to do.

INT: So you left work, where did you go? Well, now wait a minute, we only got to the point where you are about to leave or you're considering leaving without your carpool.

NAR: Well I had already decided that. I had decided that I would leave one way or another.

INT: And then what happened?

NAR: And, when he was able to free himself from what he was doing immediately, which was about 11 o'clock. He all of a sudden seemed very certain that he wanted to go. And I don't know what had made up his mind.

INT: So, you didn't have to steal his car?

NAR: No, I didn't have to kidnap him or anything like that (jokingly) He told his boss that he would take half of a vacation day for the rest of the day. And, I told my boss. I grabbed up a bunch of work and told my boss- who seemed to be in a state of confusion- that I would be back as soon as I felt the conditions were safe. I said I would continue working, on my job and I would be back at work as soon as I felt the conditions were safe. And we just left. And on the way between Harrisburg and Carlisle, we saw a convoy of National Guard. Which didn't make us feel too good.

INT: Doing what?

NAR: Well, just driving toward Harrisburg.

INT: What road were you driving on?

NAR: The main interstate, 81.

INT: Was it large, small?

NAR: What?

INT: The convoy?

NAR: Not very large, 4 or 5 trucks.

INT: But you thought that they were on hold or something?

NAR: Oh, yeah, we both assumed that they were, they had been mobilized as precaution.

INT: So then you came back to Carlisle?

NAR: Yeah

INT: And what did you do then?

NAR: I basically tried to find out what was going on, by listening to several different radio and TV stations at the same time. And I remember that the thing which really convinced me that the situation was very serious, was the first mention of the hydrogen bubble which I clearly remember was on the noon time it, it was a noon time press conference given by the vice-president of MET ED - who must of been the vice president of information or something like that. And some question was asked to him about why the reactor wasn't cooling down or something like this. A lot of the questions didn't make a lot of sense to me because I didn't know, I hadn't been able to follow what was going on. But he mentioned something about there being an unexpected bubble of hydrogen somewhere in the reactor vessel. And the thing which really triggered me was when a reporter said how do you plan to, some reporter said how do you plan to deal with this or eliminate the bubble or something like that, and the VP's response was: 'we're working on that'. And it seemed to me that, what that meant was that some significant feature of the situation was totally unanticipated and there was no known response to it.

INT: So you felt at that time that people there were not in control of the situation?

NAR: I became convinced at that at just that point. I don't think I became convinced that they were absolutely not in control, but I came convinced that there was a very good chance that they were not in control at all at that point. And, I continued to feel that the main sort of immediate hazard was public panic.

INT: Okay, so you're still, I mean in your mind it's not so much a question of what was actually going on potentially, lets say the immediate danger of three mile island so much as it is the danger involved in a public situation?

NAR: That was the immediate. . . You know, I think I understand enough about nuclear reactors to realize that they're not like atomic bombs if that's what you mean. In other words, I didn't think it was going to be an atomic explosion. But, I felt that you know, the situation was obviously out of hand. The people obviously very worried about it without wanting to say why. That was what I was reading from their responses.

INT: You felt a lot safer in Carlisle than at work?

NAR: Yes, I felt very safe but the more, I think that my fear turned immediately into a kind of a more general kind of anxiety and a great deal of anger.

INT: Tell me about your anger?

NAR: Well, I think at that point I was mostly angry. It just became clear to me why this sort of thing could happen and why, the more I thought about it, the more clear it became that the situation could get worse and worse and worse without the authorities being able politically to you know, deal with it effectively. In other words, it seemed to me that with the little bit of information I had, I would have tried to get people into an orderly kind of evacuation, but it was clear to me that the politicians were not in a position to do that. For a variety of reasons and it made me incredibly angry.

INT: So you felt that at that point the government officials were in part irresponsible?

NAR: Yeah, but I think that they were irresponsible not so much because they were weak people as individuals. I don't know that much about them, but it became clear to me what the pressures on them were. . .

INT: This is early on your saying this...

NAR: Well this all fed into my, I mean, this is all, I'm not sure how much I thought about this stuff consciously is that I think it's clear that's why I reacted so decisively is because I immediately realized that, that a great deal could go wrong and a great deal hazard, the public could be exposed to a great deal of hazard without the authorities being able politically to explain to the public what was going on.

INT: Why do you mean able politically?

NAR: Well, because they're not, people like governors are too sensitive to sort of cosmetic features of a political situation, like, you know, the emotion of the moment rather, because they don't seem to, I mean, politicians don't seem to have substantive platforms in which they expect people to vote or not vote for them. They, everything is so cosmetic that it's obvious that the governor would go, a governor of a large state would go to great degree to, would go to considerable length and risk a great deal, to avoid losing faith in a kind of superficial way. Like to avoid having it seem like something was out of control. Um, to avoid admitting that he didn't really know what was going on. Well I think that the, in a situation like this, I mean, well. I'm trying not to superimpose later analysis, so that's why I'm hesitating.

INT: I'll let you do that too.

NAR: Yeah, no I'm just trying to say what was, what I was thinking at that point. I guess I'm basically very cynical about people in authority not because I think very little of people and not because I have anything particularly against the government, but I think that, you know, I have certain views about who holds the real power in our society and the ways in which political decisions actually get made and the kinds of obligations that politicians are under and the connections between say state government and big corporations, like the utilities. I'm very cynical about that and I think that there's so much capital, so much of the sort of the resources of our society are tied up in things like nuclear power plants, that the pressure to avoid or to prevent you know, a kind of a mass public condemnation of it are so great that I think that and for decision makers at that level, confront issues very much in those terms. Like they don't really confront issues in terms of the public safety because that only, that's too diffuse. I mean they're conscious of the problems of supplying sufficient power for industries, so that they'll be jobs, and they're sensitive to the issues at a high level, a level of intense power, political power, and economic power. And I think it's at that level that the decisions about Three Mile Island were made, you know. What is this going to cost us in terms of electricity what is this going to cost the nuclear power industry, and I am so cynical about the way that the people in those positions and with that power use the power, that I felt that aINTost anything could happen. I felt totally out of control.

INT: In other words you felt that there was no, you felt individually, that there was no responsibility involved for your welfare, that other questions were primary?

NAR: Right. I felt quite clearly that the people in power would risk the public safety to a degree which I consider completely unacceptable to meet their ends.

INT: And those people, those people in power, are as you described them as you're talking, government officials and the industry?

NAR: yeah. Government officials and utility company officials and corporation officials in general. I mean people, people in control of the major sort of key industries like the energy industry.

INT: What about the media in all of this?

NAR: I thought the media was inclined to see, more inclined to see the seriousness of the issue because it would be in their interest to exploit something like this. They could, you know, I mean they're, fortunately I think, like in the Watergate, the press stands to gain by, by exaggerating the seriousness of something. And I think they were doing they're damndest to find all the gory details, to find out you know, how bad it really was, and I think they were having a lot of trouble. And I think you know, they were conveying all the information they could get- I got that impression- and in their usual manner they were doing it without having the chance to do any kind of analysis, or , it was only by late Friday I think, I started hearing news reports that made use of, you know, expert kind of testimony, like asking people who knew about nuclear reactors. Prior to that it seemed like it was mostly just relaying the statements of officials, which was very instructive because getting all these statements in a kind of a, in a kind of a montage made it clear how incoherent the situation was. At least, it definitely gave that impression of great confusion.

INT: You just went to late Friday again, and that's where we left off in your chronology, can we go there now? You came back to Carlisle, and your carpool buddy presumably went where ever he lives...

NAR: Yeah, and he also made clear that he was intending to leave town. I mean we talked on the way back, we talked about what we were going to do from that point on. And I was seriously considering leaving Carlisle for someplace even further away from the Three Mile Island. And he seemed quite serious about the whole thing, and in fact expressed some concern about his father who was in the National Guard. But he also seemed to be indicating that he would be leaving Carlisle also.

INT: Now, you got back here, did you leave?

NAR: Well, not immediately because my wife was not in town and wouldn't be back till later that night, so I went around, spent the day trying to gather more information. I talked to a lot of people about how they felt about it. And felt more anxious than I felt at any other time in my life, more aware of physical feelings of anxiety. Even though I didn't think I was that upset about it, I thought I was being pretty cool—headed and I thought I was reacting in a rational way. In other words, I felt pretty certain about the rationality of my reaction, yet the stress was very great. It seemed surprising . . .

INT: What do you think caused that?

NAR: I don't really know. I think it was a I think it was a very, probably a very deep rooted fear of the unknown, I mean it was very... because at a conscious level I think I

felt consciously like I understood the issues, not the technical issues, but the issues as they related to me, you know. And that it was clear to me that I should leave, and that it was clear to me that I did the right thing leaving work. Although at the same time, I think I felt some stress about having antagonized people at work.

INT: Did you think of that as something ethical or....

NAR: Yes, but only in for a specific reason, only because my immediate supervisor had, on another occasion, gone considerably out of his way to accommodate my personal needs at some expense -to himself, and I felt that I was under an obligation to -in any kind of similar situation- to go out of my way to accommodate him.

INT: So the relation won ?

NAR: Right, because of the specific relation I felt that he might feel let down that I had in his eyes perhaps panicked and left him, you know, with a difficult situation. The kind of job I have, there is a potential that if there was some serious problem,- and in fact this did occur- that the particular function that I, I work in would have extra work associated with this, and as it turns out, I worried that my boss would be under an increased kind of work load, obligation to do increased number of tasks probably because I wasn't there. As it turns out, that was true. Heck, that was a source of some of my stress.

INT: Was that a result of TMI or just the ongoing stuff?

NAR: Yes, it was because of TMI, I mean the point is simply that banks are considered sort of a part of national security and as a result because of the growing possibility of some real kind of disaster there, the decision was made to take certain emergency steps which are the sorts of things that my department is involved in, and as a result, my boss had to do some extra work which really should have been my work. And I had a feeling that might happen. That added to my stress on Friday even though I felt that from the point of view of my relation to the business, I didn't feel any obligation to risk my life or my health for the business. I felt that between my boss and myself as individuals, I felt that he, he would let down because his interpretation of the situation I knew would be different because he has different political views and stuff like that, So I think that added...

INT: Different loyalties and so forth?

NAR: More different political views. I think that his loyalties to the business aren't that much greater than mine, even though he's in a higher position, but I think that he just doesn't seem to see things as cynically as I do.

INT: Where there repercussions ?

NAR: To myself? No.

INT: In your relationship with him?

NAR: No. There weren't. but I'm just saying...

INT: But it worried you because you had a good relationship.

NAR: Right, right and I felt specific obligations of a personal kind to, to do that and. I'm just trying to find, I was responding to the question about why I felt there was so much

stress, was that the only thing which consciously as a source of great stress. But I think it must have just been the situation was just inherently stressful and a very kind of intuitive level. And I think it was the great feeling of uncertainty. Like nobody knew what was the reasonable thing to do. And that seemed to be the way everybody felt. . . .

INT: Yeah, what you're talking about here seems to me to be sort of conflicting responsibilities Well, I mean if you can conceive self protection as a responsibility.

NAR: Yeah, but I don't think, I think that that was only relevant because of a very specific fact about my relationship to my boss. Because the person I used to work for- my previous supervisor at the same place- I would not have felt that at all. So I don't think it was a general feature.

INT: No, this is an important clarification that it has to do with an individual relationship rather than a loyalty to some abstract concept of your job and so forth and so on.

NAR: Right, exactly. That's very critical because I was quite willing to risk my job. In fact I made a point of saying to my supervisor that I intended to continue work at home and I didn't expect them to pay me for it. But I wanted to make a gesture saying look I'm not trying to run out on the work. I'm willing to do the work. I'm just not going to be here. I don't think its safe. And his reaction at that time, -Friday morning- was, he seemed to have not reaction. He seemed kind of bewildered. I don't think he was happy, but he was bewildered.

INT: Do you have a judgment about why that might be so?

NAR: I think he felt very confused himself and I think that he, I think that deep down he would have like to have left himself. But he's more locked into the power structure in the business and would have been under much more pressure to not do that. In other words, he was in a responsible position and they would have said look you have a responsibility to the banking public to you know, sit in your seat and hand any emergencies that arise. Which is a completely irrational view but that's the view they would've taken.

INT: Why do you take that to be irrational?

NAR: Because, nothing that we do is so immediately critical that everybody in that whole building could've gone home at that point, and come back a few days later and picked up where we left off and there would've been inconvenience but no national disaster.

INT: So you came back to Carlisle, and you talked to friends and then what?

NAR: And then, I heard of a meeting that would be held by, sort of a briefind session to be given by people of the Dickinson faculty who were knowledgeable about nuclear energy and the effects of radiation and I went to that. That seemed to be the best thing that was happening. And at that point I got the most complete understanding of what may have been going on and what the potential risks were. And I think that that relived my anxiety a lot, which probably indicates that the anxiety had to do a lot with not knowing what was going on, . . . uncertainty. And at that point, I decided that I you know, I would just have to wait 'til my wife got home to be later that night before I could make a decision. At that point, I wasn't certain what decision I wanted to make but it was quite clear to me that I would be willing to leave and undergo any inconvenience or expense. I had to, to leave if we jointly felt it was the thing to do.

INT: This was before your wife came back, you had already decided that this was the case?

NAR: Yeah, I decided that I was seriously thinking of leaving town, but I didn't want to you know, make a hard, fast decision about it because I didn't know what the cost of that would be to my wife. I wasn't certain what commitments she had during the weekend and stuff like that. I didn't know how much she knew about it.

INT: Did you leave?

NAR: Yeah, in fact, my wife got home at about 11 o'clock that night from a conference out of town, as it turns out, west of Carlisle, further away from Three Mile Island, and we discussed. I told her all I knew about it. She knew a lot less than I did. I tried to fill her in on everything I knew. And I said. I thought we should you know, sleep on it and decide in the morning whether we should go. And we decided we'd watch the late news that night, which is unusual for us. We virtually never watch television news so, you know, we were, this was something done very consciously to see what the national news was showing as a sort of a barometer.

INT: Just a quickie, your attention to the media was higher than it usually is?

NAR: Oh, incredibly much higher. I usually listen to the news on the radio just about everyday, in the car. I never watch TV. Maybe once a month we turn on the TV. And we made a point of watching the TV news 'cause we wanted to see given that we know what the biases of TV news are, we wanted to see what looked it like from that point of view. And at about 11:30 that night after watching the news we just decided to leave. We decided we didn't even want to wait around any longer 'cause we really couldn't tell. We just felt the more we heard from the news the more uncertain we felt about how serious it was.

INT: Why did you feel uncertain?

NAR: By Friday night, the Nuclear Regulatory Commission was well involved and giving a lot of press conferences. And they were being a lot more straightforward about the potential of real disaster and explaining what the potential real disaster was. They were saying the chances were very small, but that an easy interpretation of that, is that this could really happen. And that's all it seems to me you need to know to want to take pretty extreme measures.

INT: Did you, in other words, now you talked earlier about the two other sources of information that we had, sort of generalized governmental situation with Thornberg and the state and so forth, and Metropolitan Edison and Company and their officials, and you found something different about the nuclear regulatory agency?

NAR: Yeah, it was pretty clear that, first of all that they were, that they had immediately assumed the position as the main spokesman for the situation. And even though the, the state and the utility company continued to issue statements independently, they, nobody seemed to be paying much attention to them, and they were frequently contradicted by the statements the nuclear regulatory made, commission made. Nuclear Regulatory Commission's, and when there was conflict between the two, the NRC was almost always more cautious or almost always had a more serious evaluation. Or their evaluation

situation was presented as more threatening. They seemed to be more realistic about it, about the potential...

INT: Did you find them then more trustworthy?

NAR: Yeah, I mean, I recognize that there were certain limits on what, there were certain political limits on what they could say also. Because they, I think there would be a serious. I think if there were, that it would be difficult for a governmental regulatory agency to come in to direct conflict with the governor of the state on policies that are problems of the governor. In other words, whether or not to evacuate. I knew that the NRC could not go on the TV and give it as their opinion that there should be an evacuation. I knew that politically it's obvious that only the government could even raise the subject. But at the same time the nuclear regulatory commission. . .

INT: ...about the position of the NRC and, their awkward position but. I mean you were saying they were- as I recall you were saying- they couldn't obviously just do what they wanted to do. On the other hand, they seemed to be some kind of independent force?

NAR: Right, and also I think that the actual personality of Denton, who was the head spokesman on the site, inspired some sort of trust, because it sounded just from the way he fielded questions like he knew what he was talking about as much as anybody did. And I was basing this entirely, not on understanding so much of the technical aspects of it but on a lot of experience in situations where people are you know, responding to criticism and defending positions. And just his behavior he sounded like he really knew what he was talking about and was in control of the situation and that inspired some confidence.

INT: So, if you had to make a judgment about who you might thought more reliable in the situation, he was one of them?

NAR: Yeah. It was clear I felt that he was the most reliable person.

INT: You left, where did you go?

NAR: We went to Washington, D.C. where my sister lives. Appeared there at about three in the morning and disrupted her life. And stayed there 'til , -this was late Friday night- so we stayed there Saturday and Sunday listening to the radio most of the time, which was very frustrating because even at that point, the stations in Washington weren't particularly concerned about it. And in fact, people were calling into talk shows on the radio and acting like the whole thing was being over dramatized. And that they really supported nuclear energy and all these people in Pennsylvania were just panicking. Which gave me a very eerie feeling. And on Sunday, we,- we couldn't stay in Washington past Sunday, for a variety of personal reasons- it was very inconvenient. We had to decide whether to go back to Carlisle on Monday or Sunday night, so that Lynn could continue teaching and I could go back to work, or whether we should on the other hand go to New York, which was sort of in the opposite direction at that point, from Carlisle. And we had gotten to a certain amount of disagreement about this, because my inclination was to go back to Carlisle because. You know, I'm sorry I think I 'm misrepresenting that. No, we both were in agreement. By Sunday night, it sounded pretty bad. It sounded like the situation which had started out on Wednesday had been continuously getting worse and -oh, I know what it was. By Sunday evening, the, there

was more concentration on talk of the possible disaster, there was more and more talk about the disaster being a core melt down.

INT: You at this point were listening to what, what source?

NAR: Radio, mostly And also we watched . . .

INT: National radio?

NAR: National, we paid most attention to network.

INT: Do you remember stations at all by any chance?

NAR: I don't think we discriminated between the major networks. We listened to a lot of different radio stations, and we made a point of being home when the nightly news was shown, and we watched it on at least two different stations who had basically the same report. There wasn't, I don't remember any difference between them. So we were paying a lot of attention to the media. We bought a Sunday paper- or, the Sunday paper we bought anyway - and we read that very carefully.

INT: Which one?

NAR: The Washington Post, I believe. And we read fairly informative articles on that. They had a, by that time they had managed to assemble a fair amount of different, of information from different sources, a fair amount of background information. In fact I think they had a quite good explanation of how these sorts of reactors worked, what the reactor looked like, what the different parts of the thing that we had been hearing about looked like, so they're a good diagram. And there was information there which I hadn't heard anyplace else. I don't remember in detail what it was, but everything seemed to me to contribute to the picture that they knew very little about what was going on. I think that I began to understand at this point that all of their information was extremely indirect. It's based on hypotheses, which were based on extreme lengthy calculations, starting with readings on certain meters, whoever, was . . . Nuclear Regulatory Commission, for instance...

INT: Okay, you're talking about the people who were actually working?

NAR: Right, the people who are actually dealing with this crisis- the technicians, the statements that were being made by them as fact were in fact, not direct observations of any sort, but were the results of extremely involved calculations and proceses of reasoning based on all kinds of assumptions.

INT: How did you know that?

NAR: Well it, the descriptions of, of the information made that clear though I think that many people would have just passed that by.

INT: Yeah, but that's what I'm trying to get at, because you're obviously feeding something, something in here, an expertise of some kind, or something, analysis of inferences. . .

NAR: Well, it's clear that my ability, my ability to see that in the newspaper reports was partly based on my background . . .

INT: In?

NAR: In Philosophy of Science. I mean understanding how scientific inferences are made and you know, the role of auxiliary assumptions in, in, drawing information. I think on the one hand, I'm more inclined to trust involved sorts of inferences than many people are, because I understand more about how the assumptions that they're based upon are supported. But at the same time in a specific instance, I think I have, I think I have the kind of background which enables me to make some kind of judgment about the likelihood that the reasoning and the involved inferences in this specific situation have not been adequately tested. And that's the feeling about this. In particular, the issue seemed to focus on the bubble of hydrogen in the reactor, and once I had an understanding of what that meant, and also once I came to understand that - that was one part of the issue and that effected how fast they could cool the reactor down. The other issue was how much of the core had disintegrated, which was, would directly influence the probability of a real disaster. When I realized that the estimates of the amount of core disintegrated were based on extremely involved sorts of calculations and inferences, that to me further confirmed the feeling that, that very little was really known about what was going on. Also, other information that impressed me at the time was the level of radiation that had been released into what they call the containment building, which is not supposed to have, which is supposed to be such in normal conditions people can work in there with a certain amount of protective gear, and I think I remember reading that the level was something like 3,000 times what it was supposed to be. Which suggested that something very, very, very serious was going on. In other words, everything I read seemed to contribute to the feeling that the situation was either completely out of control or was potentially completely out of control. That was Sunday, by Sunday evening, I felt very strongly that way. And decided that if I had to decide between going to, back to Carlisle and going to New York, we would go to New York. That was Sunday. So we decided that Monday morning early we'd leave for New York.

INT: And is that what you did?

NAR: Yeah we did that. On the way to New York on Monday, we listened to the news in the car as much as we could. We heard quite a bit of news. By that time, the media had sort of become obsessed with this to the exclusion of virtually everything else, and then almost constant information on it, which also confirmed the feeling that everybody had realized that it was a very, very, very serious kind of accident. But at the same time, the reports on Monday seemed to get increasingly more optimistic, right. Just as we had decided that it was getting worse and decided to take more dramatic kind of evasion tactics, the situation seemed to be getting better. So as we were driving to New York, I felt more and more stupid about going in the wrong direction and making it even harder for myself to get back to work. I wasn't so concerned with being at work on Monday, I didn't, that didn't really bother me, but it seemed to me that here we were headed for New York and it would make it impossible to get back to work even on Tuesday.

LM: You said you felt stupid, why?

NAR: Well, I felt that perhaps I had over reacted. Which was the feeling I had all along. I mean I felt ambivalent about the whole thing. I felt at a conscious level very justified because rationally, it seemed to me that what I was doing was a rational thing, I was acting you know, in my own self interest, based on a good information as I could get. Yet

at a gut level, I didn't feel, I, I, I guess I just didn't feel secure enough about my own decision to be able to convince, the other that was very embaress...

INT: Do you think your gut level was saying in terms of the standard of judgment?

NAR: I know, you know, I think in my case, it was just very, it's very common reaction I have, is that I just, at a gut level, I don't have that much confidence in myself. I always feel like well really, you know I'm really you know, making a silly judgment or something like that. And I don't think it really had that much to do with the situation, because I think I react that way in a whole spectrum of different situations. I tend to at one level you know, act and act decisively while at the same time feeling ambivalent about it deep down. And I think this was just an extreme case of that. I don't think that it had anything to particularly to do with feeling pressure at work from the point of view of any kind of awe of my employer or respect for my employer. I think it was more of a matter of maybe I was, you know, being dumb.

INT: So you were trying to determine which is the more rational course?

NAR: No, I think I felt pretty certain about which was the more rational course, but emotionally I felt somewhat about that, about just myself.

INT: Depending on your rationality? We're knocking pretty heavy stuff here right now.

NAR: No I . . .

INT: You don't have to do that.

NAR: No, I think that's, it's actually pretty straight forward to me. I think that the, I think the ambivalence was, was sort of just a typical thing of me. I mean, it was very, you know, I react that way a lot. Although I think it was intensified in this case.

INT: signified invariably.

NAR: Yeah.

INT: So, you went to New York?

NAR: On Monday.

INT: And did you come back?

NAR: I decided as soon as I got to New York, that we should come back as soon as we reasonably could.

INT: What made you decide that?

NAR: Uh, the news reports. And the fact . . .

INT: What particular reports?

NAR: I think that the thing which everybody was sort of keying on, was the ol' hydrogen bubble. I think that people gaged the severity of the situation in direct proportion to the estimated size of the hydrogen bubble. Which was also a matter of incredible involved inference. And I guess, by, all day Monday, the reports about the hydrogen bubble seemed to indicate that it was getting smaller and smaller and smaller, and that they were just about to shut down the reactor within 48 hours, or something like that. We didn't know at the time that in fact it would take weeks after that. They weren't saying that. At

the time, it seemed like you know, once they got rid of this hydrogen bubble, that was it, right. I think that was basically what we, we believed that.

INT: Well, it seems to me that you've indicated fairly clearly that you don't think the people over there -whoever's operating the thing and so forth- were fully in control of what was going on?

NAR: No, I don't think that they were at all in control.

INT: And the hydrogen bubble was threatening more control, . . .

NAR: When the hydrogen bubble was dissipated, it was shrunk. No, I don't know if I thought that they were in more control ...

INT: I'm leading to another question. Do you think they're in control now?

NAR: I guess I assume they are. Yeah. But I think that I found out since that in a sense, the situation was a lot more serious than we were led on. And I think a lot of information has come out since that, what they have managed to do is they have managed to manage the information that has gotten out since the main part of the crisis, in such a way as to leak out only very slowly and over long periods of time, pieces of information which when you put them together, increase by a great deal, the severity of what actually happened, not the potential so much, but the amount of radioactive waste that went out into the environment. It turned out to be a great deal more than they were letting on at the time.

INT: I have to do some checking here. When you left, was there anything in particular that you wanted to take with you?

NAR: No. Just enough clothes.

INT: Is there anybody that you were watching, or did you decide what you would do?

NAR: No, I, I was curious to find out that relatively few people I knew seemed to have the same, you know, dramatic reaction I had. But I don't think that, that really stopped me from having the reaction.

INT: Did you have any mental pictures about what was happening there, or what might happen?

NAR: Mental pictures?

INT: Imaginative pictures of . . .

NAR: No. Because I don't, I don't think you can see radiation.

INT: Do you think that anything that happened at TMI might have affected your health?

NAR: I don't really know. It seems to me that that depends on. I think the most critical time was when I actually left work on Friday morning, because they were saying at that time, that a significant amount of radioactive gas had been released and that everybody should stay inside, till it passed over. Now to exactly that point, I was driving along the expressways. Now it's poss, seems to be possible that I was exposed to a significantly higher level of radiation than I normally would be. But I don't really think so. I don't fear that. I don't think about that.

INT: What effects would you imagine that, if in fact, that had occurred?

NAR: Well, I mean, there's a lot of controversy about this. The effects of low level exposure to radiation. I don't think I really think about it too much. It seems to be possible that you know, I could suffer some genetic damage or something like that. But I don't think that that fear or thinking about that played much of a part in my whole reaction to that.

INT: What fear did?

NAR: I thought my whole reaction was preventative, you know. Seemed to be quite possible that, if the reactor melted down . . .

INT: Is that, now, is that, is that what you're imaging as the worst . . .

NAR: Yeah.

INT: The worst possible construction? The reactor melted down, then then ,then what would be the right perception?

NAR: What was my conception of what would happen?

INT: Yeah.

NAR: I thought the most serious thing that could happen would be that the core of the reactor would get so hot, that it would fall through the bottom of the concrete containment building that it was housed in, and eventually, it would go right through the earth right below that, eventually hit the water table. And which would mean, as soon as it did that it, it would hit, it would hit water, the water would cool it, would tend to try to cool it, create an enormous amount of highly radioactive steam, which would probably spurt out all over the area. And that would be extremely dangerous, probably cause a significant number of deaths , radio deaths, due to radio, radioactivity poisoning. In the immediate area. And I think that that 7 miles away, the the significant impact of that would have been an incredible public panic. And I'm sure thousands and thousands of people killed on the highways. I really think that that would be the most immediate.

INT: People trying to get away from it?

NAR: Right. And I think I that I would've been, you know, at risk in that way, immediately. Even if I hadn't been at risk to do.

INT: Do you have mental pictures of what would happen if that high level of radiation were released and so forth?

NAR: Mental picture of what would happen, like, to me?

INT: Um hmm. That's what I asked.

NAR: I don't think I thought about that very much because I, I don't think that that was. I think I was most concerned about the, what the unknown sorts of risks, you know. I mean. I really don't think I was thinking of that, because I, I read Hiroshima and remember for and very vivid pictures whenever I think about it, - of the descriptions of what happens to people and stuff like that. And yet I don't remember myself ever thinking about that.

INT: That didn't clue in when you were. . .?

NAR: No, I don't think I ever thought about that. I may have, but I don't remember.

INT: Did you have any concern about the food or the milk from the area?

NAR: Yeah, I mean I still do not drink milk from the Harrisburg area. The only milk I drink is powdered milk. Just as a precaution. I guess my, if I have a view on low level radiation, it's a view that the further you stay away from it, the better. So anything you can do to avoid any kind of exposure to low level radiation that's absorbed, is worth doing.

INT: Did you have any mental pictures about radiation, the effect of radiation on life around you or anything . . .?

NAR: The actual visual images?

INT: Well possibly, or even abstract conceptions that can be metaphorically explained.

NAR: The only thing I thought about, was the, was a feeling of anger at how most people are willing to be taken in by the people in power and assume that nothing, - to most people, if you can't see it then it doesn't exist. And the frustration of feeling like there's all these people running around getting, you know, zapped by this radiation and not really caring. And it's really impossible to motivate them. But all the, as it turns out that, that, that feeling was, was invalid, because it turned out that a great number of people felt very strongly about that.

INT: You, see this as different in some respects from say a flood or a hurricane or a war , or some kind of disaster.

NAR: Well a flood and hurricane. Flood and hurricane is certainly is different from. I mean I see it different personally. I think it, it's just at how much unknown this is. I think that the uncertainty and the lack of understanding led people, led some people to exaggerate the seriousness of the situation and other people to ignore the seriousness of the situation. I think that everybody felt that there was a lack of understanding

INT: Did you think about your own death?

NAR: No.

INT: You assumed then that you would survive?

NAR: Yes.

INT: Did you think about God?

NAR: No.

INT: Did you feel you had certain responsibilities during the incident- apart from the ones that you've already described about your job and relationship with your boss and so forth?

NAR: I felt that, I had a responsibility to defend my views about the potential seriousness of this and make them seem more certain than in fact they were. To make what. To act more certain than in fact I was, because I felt the, there's a certain political value in motivating others to react similarly.

INT: To question the situation and all?

NAR: Yes.

INT: In other words, you felt in a sense that you used this as an occasion for instruction for others?

NAR: Yeah, that, I would rather to say to exploit the occasion then....

INT: 'Cause you see it as an illus trial or what?

NAR: Yeah.

INT: Do you feel any conflicts among your various responsibilities?

NAR: Aside from the ones I mentioned before, no.

INT: You've talked about why your job at work was affected and as much as you knew what went on after that. Do you have things to do which you otherwise would not have had to do? In apart from leaving and so forth or in relation to your job or?

NAR: Did I have things I had to do?

INT: Yeah, that you felt compelled to do?

NAR: I felt motivated to get in touch with people in the community who were involved in, you know, trying to, you know, get rid of nuclear power. Which is something that, I mean, it is an issue about which I had been ambivalent in the past, and hadn't given much serious thought to. Although, I was aware of the fact that a lot of very serious minded, sincere people were very much against nuclear power, I never really understood very much why, because I never did pay much attention to it. It just wasn't one of the issues that struck me as all that important, and this certainly changed my mind about that. It used to strike me as only an example of how, you know, the corporate powers in our country will do virtually anything to make a buck. And this is another example of that. But now, having focused my attention on it more, I see it as, as a real danger.

INT: As bigger than that?

NAR: Yeah, well as being more urgent than just another example of the.

INT: At the time, did this event bring to mind any past experiences of yours? Or past events? Sort of like, did you think anything like this happened to you before, or did you associate any historical?

NAR: I really don't think so.

INT: Not similar to anything else in your life?

NAR: I think the only time I ever felt similarly was when I had to face the question of whether I was going to appear for an army physical during the draft, and I decided to claim that I'd overslept and see if I could get an extension and deal with the draft in the meantime. And I think it was. I think it's the only I ever felt comfortably like I was threatened in that kind of way, and had to act purely for, you know sort of out of self-entropy.

INT: That's why you made the connection?

NAR: Right, I . . .

INT: You don't really turn back on yourself.

NAR: Right. I felt I had to protect myself and that I had to act. I had to make a decision.

INT: Did any sort of fictions come to mind, like TV shows or movies or books or stories?

NAR: No, I, I think I continued to think of the thing in political terms because it was such a perfect example of a fear that I'd always had of what can happen in our kind of society. You know, when, you know, when a certain kind of situation which is, which arises out of the, of the organization of society and the power structure. And I was, I was just constantly amazed about how correct the sort of radical analysis of this sort of thing had been. I was just overwhelmed by how true to life all of, everybody's worst fear turned out to be.

INT: Yeah, you've been explaining a lot about that. Do you have any daydreams that you remember?

NAR: No, not that I remember.

INT: Do you have any real night dreams that you remember?

NAR: I don't even remember whether I had important dreams that I can't remember. Sometimes I remember having significant dreams, but I can't recall. But I don't even remember whether that happened. I had trouble sleeping much of the time.

INT: I was gonna, that was my next question, whether your sleep was disturbed?

NAR: Yeah, more or less that, for the whole week, sake.

INT: Do you know why?

NAR: I'm sure just because of the anxiety.

INT: Did the people around you change during the incident?

NAR: Change? You mean act in ways I wouldn't have expected?

INT: Yeah.

NAR: The only people who acted in ways which surprised me, were people where I work. Who seemed much more skeptical about authorities and of both business and government than I would have expected them to be. People all of a sudden seemed to find reasons to be cynical or skeptical about the good intentions of industry and government.

INT: And you felt otherwise they were not? That this was. . .

NAR: It was an unusual expression for a lot of the people.

INT: Do you think it changed them in any lasting way?

NAR: Some of them, I think it did. Others I think maybe only in a matter of degree. But I think it's too soon to tell.

INT: Did it change you in any lasting way?

NAR: No.

INT: Did you hear any jokes or humor about the situation that you can recall?

NAR: I'm sure that I heard some jokes in various places, but I don't remember any of them off hand. None of them obviously struck me as that funny.

INT: That's what I was going to ask you, okay. Have you developed an opinion about nuclear power?

NAR: Yeah.

INT: You indicated some earlier.

NAR: And, yeah. I mean I think that it is unnecessary and evil. Not evil, it's potentially just extremely harmful and actually harmful. More information has come out since then that has made it more and more clear that it's harmful and unnecessary.

INT: Had you, did you have that position before?

NAR: No.

INT: So this was, this precipitated that?

NAR: Yeah.

INT: Is there anything else you'd like to tell me at all? As far as asking, whatever that is?

NAR: I'm trying to think . . . No, I guess not.