Date: August 8, 1979

Occupation: Emergency Services

INTERVIEWER: Can you remember when you first heard that there might be a problem at Three Mile Island?

NARRATOR: On Wednesday morning, March 28<sup>th</sup>, sometime. I can't give you an exact time because Ted Wise, the assistant and myself were at a meeting, or on our way to a meeting in Selinsgrove, for the state. Upon our arrival there, somewhere in the neighborhood of a quarter after nine, there was general discussion about some type of a release, whatever at Three Mile Island or a problem. After the meeting started, they briefed us as far as the content of the happening and at that particular time, it was apparent that there was really no problem. Now this was the state up there talking to us and saying that everything was under control, etc. So that was really about the end of it as far as that day went. We went on with the meeting and then we came home and of course, it was on the news, and whatever. And that was pretty much it. And then that afternoon, that evening when we got home, Metropolitan Edison called a press conference for ten o'clock on Thursday morning at the Hershey Motor Lodge and I went to that.

INT: The next morning?

NAR: Yes. So as far as Wednesday is concerned, that's primarily it.

INT: Did you feel at that point that it was a serious situation?

NAR: Well, I really didn't have any feeling one way or another for it, because with the background of nuclear power and really not knowing who was pro and con. I to this day, I really don't have a feeling whether the news media's pro or con on nuclear power across the board or not. And realizing the tremendous impact that the news media can bring upon people, and the way this thing made national news that evening, on Wednesday evening, etc, it was really hard to tell. We don't have a feeling yet. Okay, there's ways of reporting news that is factual, and there's ways of fabricating this.

INT: Then you went to the press conference in the morning. Did you ever during the course of time... did your attitude change? Did you see it as more serious or not?

NAR: Well, when Metropolitan Edison went through to the chronological happening on Thursday morning, they had a question and answer period and the president, Walter Creitz, and the gentleman in charge of nuclear generation, John Herbein, went through the process as far as where the generating plant was at that particular time as far as operation and problems that they found and they went through the process in regards to what had happened and what they were doing etc. Here again, I just, I really don't know whether they were saying what they really knew at that particular time, because of nobody's fault and given the facts of what they did not know and what they were

presuming was wrong. Or whether they were downright trying to cover up so to speak. I really don't know.

INT: Just don't have any sense of that?

NAR: No, you can't. It's very hard to piece those kinds of things together. And there were so many questions being fired from the news media. And I just really didn't... I really don't know.

INT: Can we go on then with the chronology? You went to that. Did that affect your job in any way at that point?

NAR: No.

INT: Can you go on with the sequence of events? Because it clearly did come to affect your job.

NAR: Well, I went to that and I came back, that afternoon after I stopped in the State Office on the way back.

INT: Which State Office?

NAR: PEMA, Pennsylvania Emergency Management Agency, to get some times as far as notification, etc, for our records. And I get back and kind of was summarizing I guess in my own mind what was going on with the other counties and PEMA and talked with Dauphin County a little bit. And that was pretty much the extent of it on Thursday.

INT: Do you have records of all of this between you and PEMA and so forth? The timing?

NAR: On the times of notification?

INT: Yeah, that sort of thing?

NAR: Yeah.

INT: Would you make that available to us?

NAR: Somewhere it's at.

INT: Okay. I'd love to have a copy of that. You have a record of the sequence and so forth.

NAR: It's just... All it is, it involves our country as far as when we were notified. Okay, that's really it. I don't have the log charts as far as PEMA goes.

INT: No, I'd like to see ours. The study that we're doing is pretty specifically Carlisle and people who work there and the county, people who live or work here and how the county affected them. We have not gone to the other areas of the county and probably won't. Other people will be working in those areas. Okay. Then Thursday there wasn't any further activity much?

NAR: No.

INT: Now then, Friday, what happened?

NAR: We were notified at 8:31a.m. by PEMA, Pennsylvania Emergency Management Agency, of a release scheduled or unscheduled. To this day, I really don't know actually which one it was. Met Ed says it was scheduled, everybody else says that it was unscheduled. But we were notified at that time that there was a release and it was kind of shaky in there as far as perhaps what the ideals were on what to do or what was going to happen, if anything. But **Mr. Maras (sp?)** then became involved, as well as the rest of us downstairs. And we had a hard time after being notified of really finding out what the story really was, okay. And I really don't know whose fault that is other than perhaps a clear distinct chain of command through, and here again, I'm not sure who it should be through, because this has really never happened before in this way, although there have been more serious accidents from what I understand as far as nuclear generating station according to the NRC. But we were notified and then after spending some time talking about the situation, we decided to get our staff peoples together and whatever and...

INT: Who would have been talking at this time? Would this be Commissioner Myers?

NAR: Yeah, Jake and myself, Ted Wise. I think we probably made basic decisions as far as what we should do at that particular time. And then Jake had informed the other County Commissioners as far as what was supposedly going on. What we were doing and whatever. Then we started to get the staff peoples together.

INT: Now you were going to get together to do what?

NAR: Well, normally and believe me, this is really far from normal as far as...

INT: Yes, I was going to ask directly. You are out of the ordinary in your activities now?

NAR: Yes. Normally... now let me say this. This is very hard to explain, I think, as far as myself trying to get it across. Nuclear generation had always been hanging back in there like in a Third World situation. You know, so new and it's never really been addressed in the way, perhaps it should have been addressed, since the start of nuclear power.

INT: You mean addressed by emergency planning and that sort of thing?

NAR: Yeah. Because I think of the NRC and of course utilities and the way systems are designed so that nothing conceivably can go wrong as far as a full meltdown or something like that. And all of a sudden here is this whole new thing showing up on the horizon. And it's really never been addressed in the way this was going to be addressed. And it kind of wound up in a planning session and really not much operations. And normally the way that the chain of command works is you have some type of system in order to do something. Then you have operations and then you have recovery. In this sequence of events, you would normally term this operational. Okay, in other words if you'd parallel the nuclear reactor accident with a flood, okay it happened. And now you're into operations and you take care of the problems then you go into recovery. Well, this is the way it happened because this had never happened before on supposedly a magnitude like this. And so we wound up in a planning session, in a forced planning session with so many hours or so many days to come up with whatever. By the same token, we were never required to have any part of planning for Three Mile Island because of Cumberland county's at least ten miles away from the generating station itself, and the NRC plans called for a 2.2 tenths miles program around the reactor which the Commonwealth of Pennsylvania they established that as five.

INT: And that still wasn't impinging on Cumberland County?

NAR: No, in no way, shape or form. I often questioned it in certain areas, by my background, I am not a nuclear physicist and I really don't understand all the consequences of what can go wrong at a nuclear power station, although I did have some crash courses on it in the wee hours of one morning from one of the fellows over there at Dickinson. But I always felt that this county, even though it's outside the perimeter, the five mile perimeter, this county would be a primary resource county to assist the counties that would be involved. And I still believe that's the way it should be. And in the way things happened on Friday morning, we ultimately did become a resource county in a supporting role to Dauphin County to Emergency Service vehicles with loud-speaking equipment to assist the evacuation of pregnant women and small school children.

INT: I see. So we were providing support mechanisms for the five mile radius partial evacuation that took place there?

NAR: Right. But that's it as far as Cumberland County and where we stood. We did not have a plan for Three Mile Island. We were not required to have a plan for Three Mile Island. We were always told, I was always told you don't need a plan for Three Mile Island. Like I said earlier, this is a whole new dimension and was hanging back there for the last decade of two and was really never addressed because perhaps it wasn't needed or...

INT: Well, the judgment was that it wasn't needed?

NAR: Supposedly. So, we did not have that kind of a plan, so consequently we had to reconstruct some kind of a plan after we were told at ten o'clock that morning by Ken

Henderson of PEMA who talked to me directly and said about working up a plan for a ten mile radius.

INT: Ten mile evacuation?

NAR: Yeah. And that's what we did.

INT: What parts of Cumberland County does that take in?

NAR: That just takes in the borough of New Cumberland, and a very small section of Lower Allen Township.

INT: So the total county was not affected by your planning at all? Well, I mean in the sense that you wouldn't have been evacuating the total county. You might have gone to ten miles in which case parts of the county would be involved and the county would be involved in support for that.

NAR: Right, exactly.

INT: Now then that's what you started to do Friday morning?

NAR: Right.

INT: After you talked with the man at PEMA?

NAR: Right.

INT: And who did you call together?

NAR: Well, the staff people that we have in our Operations Section and keep in mind that the facility we have in the basement really was completed in December, the first week or two of January. As far as having capabilities to do what we're charged to do, and from January through February and through March, we were in the process of getting established qualified people to fill different slots, and we had about ¾ of those filled at that particular time. So we had to get a couple people to substituted in slots so to speak. But basically they were the fire police (massed here for transportation) military, radiological. I don't know if I missed any of them or not. Of course we had communications people. Anyhow it's the regular staff.

INT: Basically that was the people that you sent me?

NAR: Yeah, yeah. The list you had as far as...

INT: Were people that were somehow involved in the effort that went on over the weekend, then.

NAR: Right, right. And then it was very- it was hard to try and address the ten mile radius. Okay, it was pretty simple as far as I was concerned. And there didn't seem to be too many problems. But then we were told that we should expand our planning into twenty miles later on that.

INT: And that beings to get real big, doesn't it?

NAR: Well, it does in the sense that a lot of people have never been exposed to something like that before. So that was on a Friday also, we were told to expand our planning.

INT: Do you remember how that happened? At 10:00 you got a call saying plan for 10.

NAR: Yeah, and I can't give you the exact time.

INT: Later in the day you got another call saying plan for twenty?

NAR: Yeah, right.

INT: So did that ever expand beyond twenty?

NAR: No.

INT: So your planning then went on for a twenty mile radius?

NAR: Yeah, we kind of scrapped the ten mile and went to twenty.

INT: How did that, your perspective change the project?

NAR: Well, we had to establish routes of travel. I think that was the primary concern. Of course notification of people, but.

INT: A plan for doing so you mean?

NAR: Yeah, and then having a primary route of travel for them. I think they were the two biggest things that had to be established right off the bat. And I think after we talked about the different routes for the potential, I think it took us about half an hour to decide what the best course of action would be for everybody that was involved in the twenty mile radius. And then it was, it was just merely establishing these things downstairs in the operations room as we went along and kept right on going when we started planning.

INT: So the plan relies on private transportation? On automobiles effectively?

NAR: Yeah, that was the first move, passenger cars. Second move was school busses which we would have provided through the cooperation of the school districts. And the third move was two passenger trains from Amtrak.

INT: When in the twenty mile plan, how far were you moving people? I mean where were you moving them to, if you had done the twenty mile plan?

NAR: Well, it all depended where they lived. Naturally we took the closest municipalities to Three Mile Island, they would be the first ones to leave. And consequently, the first ones to leave went the farthest distance as far as movement. And this was, we tried to keep this in perspective that perhaps if the twenty mile radius was not sufficient, and this is just pure speculation, that we might have to jump further. So consequently we start moving the people, the closest, the furthest.

INT: So that you weren't finding yourself having to move them again, in other words?

NAR: Exactly, yeah.

INT: So you start with them and move them how far away? Say in New Cumberland? Where would they go?

NAR: In New Cumberland, went to Franklin County, I think. I believe they did.

INT: So that Carlisle was not a place where you were going to be moving people to?

NAR: Yeah, we had some people programmed for Carlisle and the Carlisle school districts. I'm just not sure whether those first couple of municipalities moved to.

INT: Well there is no need to be any more specific. The point being of course you were, having once set for ten and gone for twenty you were also keeping in mind it might go further than that. You might be asked.

NAR: Oh, absolutely. I think that if they'd have called for a twenty mile evacuation we would have really wound up in a thirty, forty, or fifty mile evacuation for just no other reason than people would have taken off.

INT: Well, that was happening of course anyway.

NAR: Yeah, right.

INT: It was happening in Carlisle. You know it was happening in Carlisle. People were leaving here.

NAR: Yeah.

INT: Without any ordered evacuation and of course over closer there was a lot more leaving.

NAR: Right.

INT: How did you feel about people leaving?

NAR: I really didn't have any feeling in regards to whether they should stay put or whether they should leave. I think it should be left up to the individual. If you feel safer by leaving, why go and leave, fine. I mean I don't think I was in any position, nor was anybody else to say we don't think you should leave.

INT: Okay.

NAR: And we kind of left it up to them and they had the option.

INT: From your perspective as a planner, was there an advantage or disadvantage having them leave?

NAR: Well, I think when you start. Once you get into a situation where you are talking about a twenty mile evacuation, then you are talking about 120,000 people. Then you start to get deep into statistics okay naturally the more people there are the more problems there are. People make problems. That's a known fact. But I think it helped down the road further, we would not have had to tend to so many people problems. Okay, the more left, the more you really didn't have to.

INT: The fewer problems you were going to have if there was one.

NAR: Right, and I think this would have helped overall as far as the actual event itself if it would have ever happened. You know the traffic jams perhaps would have not been so great. There would not have been so many people at gas stations trying to get gas. There is an number of things. Perhaps we would not have had so many idiots on the road who think they are being radiated and got to get ahead to everybody else and go 90 miles an hour down the road. Those kind of things. That would have really helped. But I think that the American public as a whole is not to be undersold when they are faced with a crisis, although I think we passed the point of no return in a lot of instances on weapons and things like that, that there is not enough time in a lot of instances to have the time to develop plans for certain situations. America is, always has been, and I think always will be an after-the-fact nation. We don't do anything until something happens and that's hard to understand. That's hard for me to understand because I think a lot of that goes against the basic concepts of life itself. You know your first objective naturally is to live, to survive, but being able to do what you might have to do in certain situations, nobody really perceives that the way they should. If we told everybody tomorrow that we were going to evacuate, I think we would have pretty good success at it, because they would have time to think about it. But if we told them at 10 o'clock this morning we were going to evacuate, I think there would be a different situation. People should have a package or some kind of a, I don't want to say package, they should have certain items within their household that may be needed just like that. I often thought to myself I'd like to take a survey of the people and how many people had flashlights in their houses that worked.

INT: In working order.

NAR: And I'm not sure that that many of them do. They might have them but I'm not sure maybe half of them would work, the other half the batteries would be shot or corroded or the light burnt out or they couldn't find the damn thing. You know? But there are so many people who depend on so many things in this country that are just taken for granted and then you're caught in a situation and you need certain things like a flashlight as a good example the thunderstorm we had at 3:30 this morning, there was a lot of lightning and they were hot strokes but if we would have had a massive power failure because of that, it would have just caused absolute pandemonium. You know people, they turn the light on in their bedroom and the damn light doesn't work and they look and they see that the clock stopped and they panic. It is so simple because they take these things for granted over the years and they just don't know what to do.

INT: You are saying that the preparedness in short, quick notification, is very low but if you had 24 hours?

NAR: Yeah time is very important that somebody have a leadership quality to these people. Excuse me, I think if you tell people and you have a plan and you tell people that they are going to do this, they will follow you. But if there is no time to tell people, maybe a good instance would be the Johnstown flood even though that was a different event there was a clear cut case where they had two floods in past and the third one came along and people did not know what to do and consequently nobody did nothing, so 77 people died and nobody even in that situation and perhaps that's a good tie in here because the people out in that eight county area, specifically Johnstown, all those thunderstorms hit – 21 thunderstorms in a matter of eight hours in a line of succession and they there was nobody at any given time once they had started ever realized that they were sliding toward a catastrophe. Nobody ever realized that until the damn town was under water. The dams had broken. I don't understand that, because of past experience and past happenings. And they knew what was going on, the water as coming up and not even anybody admitted it. The fire and the police or the Civil Defense side really thought that this was happening again but the Chamber of Commerce built it as a flood free city, and I guess that was sunk in over the past couple of decades whatever, you know, this is the place to come – no more floods and consequently they had the biggest and the best one they ever had. But there is a good parallel. Nobody knew and that was short term and that was fast, and people weren't prepared, even though it had happened to them before a couple of times and, of course, those stories are passed down in families as far as generations. There are pictures and there's a War Memorial Museum out there dedicated to the past so I don't know what to answer is.

INT: Yeah, I wonder what they were relying on.

NAR: But that's a good parallel to use.

INT: What kind of lead time did you have for this? What would people say and what would you had known? Was that a problem in this instance? If we had had to go into evacuation, what kind of time were you going to get on it?

NAR: Hopefully nine hours. Each county was asked how much time they thought they would need to get all their people in place to assist with it and the average figure came out to about nine hours and that was all the counties as far as the, keep in mind the military Nation Guard had great bearing on that figure because of how long it takes to activate the Guard and how long it takes them to get to their Headquarters and then be dispense out and all that running around and stuff. Even though they were on alert, it certainly was no problem as far as any of the other identities in the county structure as far as Special Police, Fire Police and then if it would have happened there would have been significant time for everybody to get out, safely and if it would have been done it would have been done in a precautionary type of thing at that particular time. Although, there were, I guess some hours in there Saturday when I'm not sure anybody knew anything about the place. You know what was happening inside or whatever, that perhaps we wouldn't have had that kind of time.

INT: That would have been kinda your desirable time?

NAR: Right.

INT: Not clear whether you would have had that or not?

NAR: I think we would have had as far as Commonwealth is concerned "force support" and realizing at the same time that commonwealth was doing a lot of bringing in outside resources or making different types of machinery and equipment available to the Commonwealth should it be needed. And I think that was cranked into the overall time level. And there are a lot of Federal Agencies that were involved in as far as bringing in additional supporting equipment and I'm sure that was also cranked in also. But as far as time, I think that would have been significant as far as the amount of time needed. I don't really think we would have needed 24 hours to clear out the county. I think the people were told it is time to go and the right person was on the radios. I'm just sorry that the damn thing never happened.

INT: Are you?

NAR: Yeah, because I thin we learned so much but...

INT: Want to see if it would work?

NAR: Well, I'm quite confident that it would have worked, but there are so many unknowns, it is easy to say this and it is easy to say that well you can have the best plan in the world and if you have the wrong person on the radio that doesn't have the quality and speaking voice and a good set of instructions in front of him, say the Governor, if the Governor or maybe Jimmy Carter whoever would have said that it's time to go they

could throw the whole thing into pandemonium. It would have been real interesting from that point of view. But I think if the right person would have been standing there giving the why, ifs, ands, and buts, that they were going to take people out as precautionary measure I don't think we would have had a problem at all.

INT: We have gotten about a dozen variety of agencies involved here, how do you feel about the media's handling on the situation as it went?

NAR: Well, I think the media around here did a quality job. The national news media really did a job on the event itself and I think the national news media sensationalized it and they exploited every angle that was to be exploited. I understand that they had the different channels as far as communications, the NRC, and Met Ed they were monitoring those channels down there and consequently they knew what was going on inside internally and piecing the transmissions together suppose they come up with stories. But I think, all in all, as far as local newspapers, radio and television they did a good quality job of reporting facts but I think the people from the outside really blew it way out of proportion.

INT: Did that cause you any problems?

NAR: I don't think it did from the people who lived here in the area. Naturally they are exposed to the national news media out of New York at 6:30, but I think in a situation like this that the more-- they leaned more towards the local coverage at 6, or the first hand up to date information but I think it was the national news media coverage was detrimental to the overall event because the people who had friends and relatives within the area in question naturally they were from all over the United States and in a lot of instances foreign countries and they are exposed to the national news media which caused consequently, made those people call their relatives who lived back here which created an awful lot of tension and a lot of conversations like we heard the place blew up and we heard that 10,000 people already died from radiation exposure and things like that which is pure fabrication. And those people only knew those kinds of things because of what they were told or what was printed in newspapers outside of here. I remember one story was in a Missouri newspaper I can't remember which one, but they said the smell of chocolate was going from Hershey forever which is just utterly ridiculous. I don't even know how a six year old could believe a story like that. But there's a good instance of just pure fabrication and people being exposed-- that went from here on vacation, they say where are you from and they say I'm from Harrisburg, Pennsylvania. Oh yeah, get away from me. You are radiated. So, I think that had a detrimental effect on perhaps a person who lived here, perhaps their clear cut thinking because of what they knew then they were told something else from a relative in California of what they heard from the national news media which confused the individual that perhaps already in his mind had made up a decision as to what he was going to do or what he did. Then I think that helped to cause confusion with the people here and also tied up the telephone lines. But other than that, I think the national news media was out of it, it wouldn't have been this bad, but by the same token, a lot of it is all speculation and second guess and Monday morning quarterbacking but if the place would have blown up I use that literally, most

people understand that rather than meltdown, then perhaps the national news media would have been right in what they were saying. In the national news media there is this step climbing as there is in politics. The guy who gets the lead story, the guy who gets the scoop is to be on top and follow Walter Cronkite or John Chancellor or whatever so there's a lot of fighting like there is in politics. And I think that had something to do with the way it was handled from a national level.

INT: What about the other levels of government? How do you feel they responded?

NAR: Well, that's a long story in itself. The Commonwealth last November 26<sup>th</sup> revised their previous law which was mainly Civil Defense and Civil Defense structure in Pennsylvania. And they finally eliminated the name Civil Defense. Thank God. And in this new act it encompasses everything that can conceivably happen on the face of the earth myself is responsible for the County Commissioners and I understand that and that's perhaps the way it should be and it also brought to light some training that was required on a local level by local coordinators of which there are 2700 municipalities and 67 (end of side 1 lapse)

INT: You are talking about a new act.

NAR: Local elected officials are responsible within their jurisdiction for the same reasons as far as the law goes anything that can conceivably happen now it is very obvious that a township and we use Cumberland County. It is very obvious that a township like Cook township with a normal population of 71 people certainly does not have the personnel nor the resources to cope with a happening of let's use a hazardous materials spill, perhaps that East Pennsboro township would have because of the equipment and things of that nature, so there's two different systems but working under the same law, so consequently as for when the country comes into play when there are two or more local governments involved they county then becomes the coordinator and anything above that the bigger the county still remains coordinator. That's good as far as state law. The state law has revised. This is a step in the right direction although it's not the total answer, but I think there's, I think what's happening is there's counties not all counties, certain counties I think there's a half a dozen counties in the Commonwealth that have superceded the state as far as methods and heavy equipment internally like in this place in Emergency Operations Center that it surpasses state as far as methods and procedures and things like that. I think this county is one of those counties. At the state staff there are 44 in PEMA and as far as I know and I have asked this question to a lot of places and to a lot of people a lot of times there are 44 states PEMA people none of them have ever been a county coordinator or local coordinator. There's a tremendous difference in reality of the ways things are down here where it's really out against the way somebody thinks it should be all of the military concept at the state level out against the way somebody thinks it should be all of the military concept at the state level and primarily most of those people over there are ex-military personnel, either in retirement through the military or they have had military experience and came to work for the state. But nobody has ever been (a hundred?). I think this is a fallacy that has to be corrected although I don't know how you ever correct it because of the Civil Service rating system

and then point preference. I might have the identical score, 99.9 on a test, but because that fellow has the ten point preference he gets the job, but I might have more experience and know how in how to accomplish something where it is really at down here at the local level.

INT: Because of your experience as a County Coordinator?

NAR: That's exactly right, right. So that's one area that I think has to be looked at and by whom I don't know. The federal side is basically the same side where it is the GS Civil Service system and people take the test or whatever and they get on the listing and they wind up coming in as a GS 10 in a slot that perhaps is a local field operations. And the regions, there are now ten regions in the United States in the new FEMA concept, the Federal Emergency Management Agency, and the individual who perhaps has the job, or perhaps won this job because of the test has absolutely no idea of what the job consists of. Never been exposed to anything like this on the local level. As a matter of fact this is, this as, Three Mile Island was the first time where a regional field office team was sent out to the actual site. We had a couple of those people here.

INT: They were here working with you?

NAR: Yes. It took the basically a day to understand why they were here in Carlisle already and becoming familiar with this atmosphere where we don't work like the federal government does, and we don't have the sport coat and shiny shoes, and super neck tie concept, and that's very hard to understand or to talk to somebody about. Down here at the local level we know where everything is at, and we know all the elected officials. I think I know all the Presidents of, or the Chairmen of the Boards of all the local governments on a first name basis. And if that is part of the system we have to establish that kind of a rapport in order to have a good conversation. Whether it be some routine matter or something that is (snaps fingers) just like that. They have to know me and I have to know me, and they relate to you better because you are one of them and you are not some federal person that supposedly knows what the answer is. I think the federal government on this side, this agency and the state has a lot to be desired. But like I have been told many times, "Who the hell are you to say that?" And I understand that you are stepping on somebody's toes, but after a while I think you get tired of it. And I think that's one reason in the, in this state of the 67 counties, they lose a lot of good potential coordinators that might perhaps want to make a career because of the way things are done or the way things aren't done, against the way things should be done.

INT: Could you talk about his now as related specifically to the Three Mile Island thing? Did you find problems here? Did you find coordination problems in the hierarchy or?

NAR: Well, I don't, no I don't. Because I know the people at the state, every one of them, and I know most of the people – I would say ¾ of them on a first name basis on the federal level, that would be the regional level and they know me. And I have always been very outspoken because of funding projects. You know, we get in and intelligibility and things like that, and I don't hold back too much as far as telling them what I think.

And that's not me personally speaking. It is just the way the federal government is set up and the state government in a lot of instances. And this is just because of the way it has been over the years, but it has to be changed. The only way the federal side is every going to be changed is through the Congress and I'm not sure the Congress was too excited. And I'm not too sure the Congress of the United States isn't satisfied in. In my own mind, there are 3000 counties in the United States, so there are a small number of people like me that have to harp to the congress of the United States. That's not a very good statistic as far as a labor outfit who wants to try and accomplish something, because we don't have a good volume as far as a speaking voice to log with the people in congress. We really don't have perhaps what we should have although I know they know we should have other communication systems. New communication systems. More modern ways and means of doing things and making more funding available to counties and cities across the United States. But, I'm not sure their attitude is, will let it happen. It can happen; we'll just provide the bucks to clean it up. That's how I kind of visualize it. You know if it costs ten billion dollars to clean it up, why all they have to do is throw it on the floor. I mean, who is going to argue about that? That is after the fact and so they appropriate the money and away it goes.

INT: This is part of the pattern you were talking about earlier on?

NAR: Yeah, I think it is a whole pattern and it's not. I think I can say it is across the board throughout the United States, whether it be a county in Michigan or Kansas or California. I think it is all the same. If you are in a good per capita county, and this has turned into a good per capita county in the last three and a half years as far as tax dollars and investments, you know, with things like that. I think you can. You have a little more flexibility and a little more freedom as far as elected officials saying, "Yeah, we have that extra twenty grand to do what we should do or to make the system perfect. But let's face it. Three quarters of the counties, and I'm guessing when I say this, three quarters of the counties throughout the United States, and the cities even worse than that are not in the same boat. They have enough problems, and they don't have that extra, those extra bucks to turn into the emergency side. Emergency services always seems to be on the bottom of the totem pole, because it's always "It can't happen to us." It is that attitude across America. We don't do anything until it is too late. But anyhow, I think the federal government and the state government they have a lot to be desired. And I have really I think, in a lot of instances gone against what they say or what they recommend. And we kind of base everything here on the reality of something. Of what works and what doesn't work and some of the guide lines they want when we finished our Three Mile Island plan, it was very basic, very down to earth. A lot of common sense. But I had to crank in all the hearts and flowers to the plan to give it to the state and the federal government. I was really hesitant on doing that. I was really hesitant on doing that.

INT: What do you mean by that?

NAR: Well, they want each annex in the plan, you are supposed to outline the purpose of it, the authority, the concept, about a half a dozen different areas. And that's, I guess that's nice for Bill Scranton or Dick Thornburg or Jimmy Carter who have no idea even

what it is about. And what it really amounts to is you are putting down an paper all the information, so that when somebody who does not have party affiliation — a Congressman or a legislator — he can read it and he can understand it. For what reason, to this day I have no idea because they have no authority in this county what so ever. And I could really care less whether they do or they don't. But I have a tremendous hesitancy about doing that. I didn't want to do it, and I didn't really have the time to do it, and with all the problems with state and federal government in previous years I just didn't really care whether it was done or not. But I did it. So that necessitated, I don't know. I think our book ran a hundred and eighty pages, thirteen annexes, so probably sixty of those pages or so is taken up by a bunch of words, a bunch of hearts and flowers. That's what I call them.

INT: You felt then that the government, other levels of government were functioning reasonably well during this or just were irrelevant in a sense?

NAR: Well, you know the state. The federal government supplied us with a communication system where the six counties were tied in, and they provided us with some people. The communication system was fine, but we should have had it in the first place. You just can't fly communication systems all over the United States when you need it. The stuff today happens too fast. Consequently you might get there after the fire. What we need are those kind of things here now, so that we can use them when the time comes to use them, plus some federal people that were sent here that I spoke to earlier. It really didn't make any difference to me whether they were here or they weren't. They are nice people, but they didn't have any bearing on our role planning. I think they were sent here for perhaps if no other reason than for exposure to the real world for their side of the family's sake. And the state people, we have one individual here, Joe Dockerty, from PEMA who was in the western area of Indiana. And Joe understands problems and he is thirty years old. He is one of the young people, and I consider myself young, who knows what is needed and he understands it. Consequently we work very well together and in good harmony, because he is a realist, too and that is what it takes. But other than that, the Commonwealth did not provide us with one single thing. They did work on two Amtrak passenger trains which we never had. I understand they were being programmed into the system, and we told them what we needed and where. But that was the extent of it, and some trucks or Penn Dot materials, Penn Dot vehicles. The typical things that you have from state agencies. But you don't see them, a tremendous difference between somebody telling you you are going to get a hundred thousand dollars and seeing it on the table. But they act as a coordinating norm only, a paper mache machine. And that is really the extent of it. There there really wasn't a whole lot that the Commonwealth provided us, nor the federal government.

INT: How about the local governments?

NAR: The local government.

INT: How did they respond?

NAR: Well they-local government responded way above the cause, I feel. Local governments are the key to making things happen. It's not so much the county. The county can provide in a lot of instances a guiding light, but local government is where the people live that are in the county. And they have good responsible elected officials. And I feel everybody responded in a positive manner in this county. I really didn't hear any detrimental comments that were derogatory to the over all concept. You know it is an occasion where so many people had to be moved out of the area, and the object was to see that they were moved, and that was it. And then it is a case of how you are going to do it, and every body pitched in and did their bit and people went back like we asked them to and did their planning and got some programs together and route of travel and things like this. It worked well. I just absolutely have no... And I think that's another reason why we felt the thing would have worked so well, because of the real true, good response that we got. I think this county shined above the other five counties in all areas. We were the first county to have our plan done, and that even included the three counties that have five miles within limits. We supplied resources to Dauphin County when the thing started, and we got the resources back and we assisted them. Then we went to planning. We didn't take the guff that a lot of municipalities did in York County and a lot of people were critical of Dauphin and Lancaster. We did not take the guff here. And I think the key to it is local government. They were involved from the very start. We did some over all planning in the beginning, based on the requirement that we are charged to do. And we outlined it to them, and we said this is what we have been told, for a twenty mile evacuation these municipalities are involved, these are the two main routes of travel—route 81 and the Pennsylvania turnpike. Now we would like you to plug in to this. Do you have any changes? Stand up and be counted. Any suggestions. Anything we've missed. Let us know. And some good suggestions come out from the local government. We made some changes, but it worked well, it plugged in real well. And I think that is because every body was involved. Nobody was left in the dark, everybody had equal opportunity from all agencies in the county and from all local government to meet at one time or another in the 21 meetings that we had in four days.

INT: 21 meetings in four days, and some of those would have included all those people. I mean you would be briefing them and they would come back with their parts and so forth.21

NAR: Yes.

INT: Who were you working with in Carlisle?

NAR: The borough of Carlisle?

INT: Yes.

NAR: Well, we went to the local coordinator, who is Rick Homer, and I guess you talked to Rick.

INT: No, I am going him.

NAR: That of course in there is a little different situation because the borough.

INT: Right.

NAR: Yeah, we are right here and it is a little bit different than perhaps New Cumberland or Shippensburg since you are right here. But the same chain of command and no problems. Mayor Davidson and the borough council and Frank Giordano, the police chief, and Bill Alwood, the fire chief. Just no problems. Good concepts, good solid thinking thought through real well.

INT: Even under the press of that time and so forth?

NAR: Yes, yes. Real good constructive material coming out of it.

INT: What, you were going about twenty four hours a day then during that time?

NAR: I think the first day, well I went home to take a shower and change clothes but then that was on I guess early Saturday morning about four o'clock I went home.

INT: I'd like to try and turn to a little more personal side of this now. Did you ever think about leaving?

NAR: No.

INT: Did you ever think about having your family leave?

NAR: Yeah.

INT: Did you?

NAR: I told them.

INT: Did they leave?

NAR: Yeah, and my wife... My wife knows me and my wife knows my job and so do my kids. I think my kids, my girls who are 9 and 12 perhaps through me are very much aware of what they should do and what they should not do in emergency situations. And I try to teach them those things as they go along and the situations present themselves. I think a good example would be my nine year old daughter. If she hears the first — and this has been with her ever since she was 4, 5, she understood what thunder was — if sees the sky getting dark or if she sees thunder, She is very, has a very good instinct in regards to seeing that the wash is off the line. She is 9 now, or closing the windows or getting the cats in. Things like that. And the 12 year old, she is like that also. So they understand me, and if I say I think we should do this, I think we should do that, they understand. But I think my point that this particular event was, this was the first time something happened

that nobody could. Especially kids — see touch, smell, feel, hear, a little bit different. So I told Pat, I said why don't you just take the girls and go on down to your sisters in Virginia because I don't want to have to think about you. And that was in myself, you know, here to do the job.

INT: And expect to be here.

NAR: Yeah, to me it was just like a flood or what ever we have gone through before. I really don't have any feelings in regards to what it is or whatever. I like what I am doing and I think I'm one of the best of what I do and I don't say that because I think I am better than anybody else. I think I have tremendous instincts of a lot of these different things that happen and people behavior and whatever. I saved a girls life one time through intuition when I was in ninth grade in school and I think that had tremendous bearing on maybe my sense of direction. But getting into a field like this is hard to find, it's kind of buried because it never surfaces until something happens. So I have always liked it and I enjoy it. And it is hard to, you can't go to college and get a degree for this field. You can certainly go and get an administrative, some kind of an administrative degree but you still have to have the experience and the know how and the field experience to do this kind of work.

INT: During the time that this was all going on, did you think of the former experiences that you have had?

NAR: Yeah. In some situations I have read a lot of material on evacuation from hurricanes on the Gulf Coast which has a direct tie as far as evacuation and the evacuation from Wilkes-Barre in 1972 of 80,000 people. Things that work and things that don't work. And I used some of that experience. And also being exposed to Agnes in '72 and I was a deputy at the county at that time and then in '75 Eloise. I was the acting county director because the previous director had passed away. And I handled that on the county level, and then I was sent to the city of Johnstown by Ken Henderson in '77 to establish the emergency operations center for the City of Johnstown itself, which is what we have down here and what they did not have out there. And to assemble all the things which make the system work as far as the status warrants, and seeing that the different people in specific areas — staff people, fire police, etc. — sit in the sequence that corresponds to the services that they provide so that they can talk amongst themselves, charts, methods of doing things, message forms — in coming, outgoing — and all those kind of things. So I had a real good back ground as far as being in the same type of situation as far as an emergency even though this was kind of different. You know there was no flood waters of things like that.

INT: You might talk about that a little bit. You already said it is different because you can't see it and so forth and so on. Do you think that makes it more worrisome?

NAR: Oh, I don't know. Maybe there is a standoff there because in a real bad disaster you have trouble doing things. Well, in Johnstown is an example. It had already happen so the impact was already there on the people. Plus it was so bad you couldn't go

anywhere. Even the resources that were coming in had a hard time going because they couldn't get to where they were going because the bridges were gone, the highways were washed out. I think maybe that is a worse situation than having the sun out and everybody can get where they want to go and there is nothing holding them back. And you know, it sure is perhaps a tense situation but by the same token they don't have that tremendous burden. You know, can I get down the road in awhile to get a loaf of bread or a quart of milk or to get gas for their car. They can go and do it, and they have that option to get up and leave whenever they want to. So, but that is the common, ordinary citizen.

INT: If the worst had happened over there, what do you think might happen?

NAR: Oh, you mean as far as if it had melted down?

INT: The plant and so forth, yeah.

NAR: I really don't know, because. I'm not sure anybody really knows to this day because of difference of opinion of what would happen. One nuclear physicist says a quarter of a mile, and that would have been it. I talked to some that said a hundred miles. You know, just complete devastation as far as radiation. You couldn't come back for a century. So you know, I.

INT: Did you have any mental images of that? Of what the area might have looked like and so forth.

NAR: Oh, it would have been barren, I suppose. I don't know how fast it perhaps would have be come barren, and that is perhaps because of the intensity of the radiation what that would have been. I have seen pictures of an area in Russia that was, that had a nuclear happening back in the fifties. It was just desolate and barren for just miles and miles and miles.

INT: Did you think of that during the time?

NAR: It ran across my mind once.

INT: Did it?

NAR: Yeah. I thought about it, but that was about it. That would have taken, and I'm not sure if that would have happened. I don't know when it would have happened, I guess it all depended on the intensity perhaps of the radiation would have turned the leaves. You know browned them and they would have dropped in June or really never come out in full or whether it would have waited until the next growing season, the next spring. It was interesting to think about that for a couple of minutes. But other than that, you know, I have seen so many things that are ruined in, well I think Johnstown. I have seen a lot of movies. I have seen a lot of pictures of other things that have happened throughout the United States and Hiroshima and Nagasaki.

INT: Did those occur to you?

NAR: No.

INT: During the time? Not at all?

NAR: That, I guess that is another type of destruction, but I think with Johnstown was, and maybe that was because I was there. I saw so many odd things that you just wonder how water has that kind of force that can do that. Water is the most powerful thing, most destructive thing in the world. But the oddity of things. You know, rail road rails twisted and sticking up in the air. Twisted like this, in a rope type thing. You really have to stand to look at that and think about it a little bit, because that is odd. And you just wonder how water can do that, but I guess it can. But that I think, that area was just absolutely so devastated part of the world. But you know that is a little bit different. Here everything would have been just the way it is, I guess. Except there would have been no greens and maybe no birds and no whatever.

INT: No life?

NAR: Yeah, just kind of a desolate. If, if that was the case as far as a hundred miles.

INT: Do you have any ideas about the effects of radiation on human life?

NAR: Well, I am just familiar with what radiation can do as far as reading about it.

INT: Would you talk about that?

NAR: Different types of radiation, and being exposed to intensities of radiation. I don't know any more than anybody else on low level radiation over a long span of time. I guess that is a question of time to find out what the answers are to those. But, well I really have never been close to anybody that was exposed to radiation before. But all I really know about that is what I have read and what it does and the cancer causing side of it, the genetic side of it. That's really about it.

INT: Do you think that anything that happened at Three Mile Island has harmed your health in any way?

NAR: I have no idea. You know, I don't know.

INT: Were you worried at all about the food or the milk from the area?

NAR: Not really. I don't really think too strongly on it, some of those things. I guess if it would have harmed the milk or the potential was there I wouldn't have drunk milk.

INT: But you did as it turned out.

NAR: Yeah, sure.

INT: How long did your family stay away?

NAR: Oh, I guess about four days.

INT: Over that weekend? When did they leave and when did they come back?

NAR: Oh, they went Sunday morning and came back Thursday.

INT: What made you feel confident that they could come back?

NAR: Oh, the demand for them to come back. My wife was in an outrage.

INT: Oh, she wanted to come home?

NAR: She wanted to come home, so I went down and got them and brought them back. But that's the reason. They were really not that excited about leaving in the first place, but I, like I said I wanted them to go because I didn't want to have to think about them at the last minute for what ever reason.

INT: If there was some sort of an evacuation.

NAR: Yeah, but I think they, like I said earlier, they were a little bit different because they had been exposed to so much. They were so used to telephone calls at three in the morning and me leaving to go take care of this and to take care of that. It is kind of like a different situation.

INT: So your ordinary routines were pretty disrupted, in other words?

NAR: Yeah, yeah, so.

INT: I want to check through, we have gone through a lot of the questions, but I want to see what we might have missed. At any time during all of this, did you think of the possibility of your own death?

NAR: No.

INT: So you were pretty certain you would survive?

NAR: I would have thought so. Our facility is, down here in the EOC it has a pretty good protection factor and that is required when you do is when you build it. So I, you know, I guess, we were all depending what would happen, perhaps if I would sooner think that I would have a better chance of being killed walking across the street to the Gingerbread Man than something like Three Mile Island.

INT: Did you think about God during the incident at all?

NAR: I don't know what to tell you. I don't really recall it.

INT: Did you pray?

NAR: No. I didn't have time to think about it.

INT: Too busy?

NAR: Yeah, too many things like.

INT: Did you happen to flash on any kind of TV shows, or movies?

NAR: No.

INT: Did you have any daydreams that you remember?

NAR: No.

INT: Did you have any sleeping dreams that you remember?

NAR: No. I don't dream.

INT: Was your sleep disturbed at all?

NAR: Just by the phone.

INT: O.k., you were being called to come over here and so forth.

NAR: Yeah, whatever.

INT: Did you observe any changes in the people around you during the whole period of time?

NAR: The only changes that I saw were the lack of the Commonwealth or the Federal government to provide a clear sense of direction, and this was all tied in with the over all planning concept and being asked to do this evacuation program. But not really knowing if we would have the school buses or the school buildings to have the assembly areas and to have the people go to because of the Commonwealth's position on opening or closing the schools And that became very irritating I think to everybody.

INT: That you weren't getting guidelines from them and so forth?

NAR: Including myself, and no politics involved whatsoever. You know, to me that is just horse manure. But it was a clear cut case of whether the government was going to do

this or whether the governor was going to do that. And I think that became irritating to the people that were charged with the responsibility to do what they were doing. You know, either do one thing or another, but do something. That's the only area that I saw. Other than, I think people become tired of drinking coffee, okay. And they smoke too many cigarettes. Other than that, I think that's all.

INT: People were pretty much as they usually are?

NAR: Yeah. I believe.

INT: Did you hear any joking?

NAR: Oh, lots of it.

INT: Can you?

NAR: Oh yeah, lots of it.

INT: Are you willing to tell me about some of that?

NAR: Well, I thrive on the, in worst case situations, to be cheerful or to tell jokes. I think there is an obligation on my part, speaking of myself, to make everybody else feel very comfortable and make them feel at home and make them feel like they are part of the family. And joke telling and Three Mile Island, and meltdown, I think a lot of the jokes came out of things that we heard.

INT: Can you remember any?

NAR: Yeah sure. One lady in New Cumberland found sap on her patio and thought it was radiation and wanted somebody to go down and check it out. Flies. Nobody could find any flies and everybody said they were radiated. Absolutely no tie in whatsoever. Dead birds, we had a lot of calls. I shouldn't say a lot. Maybe half a dozen calls on people found dead birds in their yard. It wound up some of them shot by kids. You know, a normal. I guess some of them died because they flew into glass windows. No tie in at all. But I think most of the jokes and the joking that occurred was in some way, shape or form tied in with Three Mile Island and those events. And a lot of joking because of the people involved and the indecisions.

INT: Can you remember some of that?

NAR: Well, the minutes of the Republican Administration in Harrisburg. I'm republican, which like I said has no bearing whatsoever. But the fact that a lot of Thornburg's administrative people were just introducing themselves to each other and absolutely had no idea how state government worked or the chain of command and very poor press conferences which were very obvious to the people here, joking about this and that and the other thing. Those kind of things. And some of this was a statement staff and federal

side and running the NRC, trying to run the program from Bethesda and not at this site. And Metropolitan Edison either telling the truth or lying, coveralls. All those

## [Continues on tape 2]

I'm really not sure. To this day I am really not sure how they would form, because of the NRC's takeover of the utility. I just don't really know to give any kind of an answer. I'm just not sure. Now I'm not sure that anybody will know until all the facts come out as far as what happened or what didn't happen. But I think their credibility certainly is on the line because of some things that happened when they said earlier, before the NRC took over, but by the same token I am not so sure about the NRC and their credibility anymore. I'm like anybody else.

INT: Just don't know what the government is up to.

NAR: Yeah, and I'm not sure even what the NRC. I think the NRC come out the other day and said this was a normal happening as far as Three Mile Island. In so far as they let the systems function as they would have functioned as they would have functioned. To me that is and irresponsible statement, and I don't know how an organization, well, not an organization, a body of people who are credible in the field of nuclear energy, could ever make a statement like that and expect nuclear generating stations to continue to be built and continue to be the source of. I'm not sure if that is a very positive statement on their part to make. And I am not really pro or con on nuclear.

INT: That was the next question I was going to ask you. Do you have any position on nuclear power?

NAR: Not really. I think we're. I think nuclear power is a substitute at the present time for the next ten, twenty, thirty years until the answer is found as to what is the source of energy. I, I like solar, myself, but it is still a few years I guess away according to a lot of people. But by the same token I heard that the government has covered up a lot of ideas that people have come up with as far as solar and the cost of solar and the developing of solar energy. But I think you are 72 on line with I forget hew many to come on line over the next couple years. And I think this is a case where you have to live with Nukes for awhile, anyhow. But I think we have to have better controls over emergency planning for them. I'm not sure that they should be located in the places they are located, even though I have been told that the cost to construct like Three Mile Island in, above Luzerne, maybe in Susquehanna County, you know up there a where it is not so populated and the cost to then shove the electricity down here is almost prohibitive as far as the cost factor. But I don't think building Nukes in populous areas is a very good idea, but then I really don't know all the facts as to why they build them where they do other than cost factor.

INT: Was there anybody that you found in all this particularly reliable in terms of information and so forth?

NAR: Well. You mean from any agency or identity.

INT: Agency or anywhere, anyone that you were consulting that you found particularily reliable?

NAR: No, as far as what was going on, no. Because there were a thousand different opinions, and nobody really knew.

INT: Do you think that presented a particular problem?

NAR: Well, I guess maybe it did as far as what the potential was for something to happen with the reactor and the containment building itself, and that was the key to everything. But I really took, I think with a grain of salt, everything I heard and we just continued on with our planning effort with the realizing in the back of our minds of the ultimate of what could happen and using that as the, you know the guiding light. And if it didn't happen, which it didn't, why you know, fine and dandy.

INT: Who was telling you about it?

NAR: Well, the news media. They were the central source of what was going on and there was no chain of command that there should have been, it was broken down from the utility to the NRC to the governor's office. It should never have gone to the governor's office, never. It should have gone to PEMA. The governor should have been at PEMA, the lieutenant governor should have been at PEMA headquarters, and that is where it should have originated. All the information. It should have came to the counties before it went to the general public. Consequently we were listening to the same thing on the radio or the TV as the general public was.

INT: And that was going to be your primary source of what was going on then?

NAR: Yeah.

INT: Do you think the whole incident has had any lasting effect on people in the area?

NAR: I really, I really don't know that it has. Myself, it really doesn't have any bearing on me.

INT: It hasn't changed you in any lasting way?

NAR: No, except that it has just magnified my work tremendously.

INT: Has it?

NAR: Yes. But, and my family. My wife is sick of hearing about Three Mile Island on the news and I think the general discussion of people I run into is slowly leaving the area. Now, I am sure there is a different apathy around Three Mile Island — Goldsboro, Middletown, places like that. They perhaps might have a different attitude, but I think

we're the (unintelligible word). I would imagine it would have some kind of an effect on some people. Everybody is different, but it doesn't have any effect on me and I don't think it was any effect on anybody in the courthouse, really, that I have talked to. Except we are sick of hearing about it, Three Mile Island.

INT: Do you have a lot of plans you didn't have before?

NAR: Well, they are kind of obsolete.

INT: Are they?

NAR: Yeah and I have to go with the new working and the new ideas on planning form, and that is what we are doing now.

INT: Are you revising now?

NAR: Yeah, and it calls for a ten mile evacuation plan, with a fifty mile cover up for the food ingestion chain.

INT: Well what does that mean? It calls for a ten mile evacuation plan and a fifty mile what?

NAR: Cover up.

INT: What does that mean?

NAR: Well the food chain, cows, animals — farm animals, and I'm really not sure what it has to do with humans or not. We didn't get that far yet, as far as trying to read between the lines, question between the lines, but I am under the assumption that it means that livestock etc. would be put into barns and not allowed out if there was to be some type of event. So that is our planning now, but I'm not sure we should go ahead full scale with it because I'm not sure that that Three Mile Island will ever open again in my own mind. There is a tremendous amount of politics, I think, involved in whether Three Mile Island opens and realizing the fact that Jimmy Carter is a democrat and Jimmy Carter needs the electoral college of Pennsylvania which is now Republican and what has happened in Pennsylvania will be to his benefit to close Three Mile Island forever. I am just nor sure if what, and if it closes, why we wont have to worry about it planning for Nukes, around here anyhow. So we'll have to wait and see what happens. But we are going ahead with the ten mile thing. All we have to do is really revision with those two local governments and go to the farm community through the Ag office with the cover up thing. Let them work on that this winter.

INT: Much more leisurely planning than you were doing before, right?

NAR: Hopefully, hopefully. That place is really not, from what I understand, stabilized to the point where it could not be taken for a grain of salt. There is still a lot of things wrong down there.

INT: I meant to ask you that. Do you think it is in control over there yet?

NAR: Well, the core. There is still a temperature of about 275 degree in the inner core, and it has been like that ever since they got it cooled down. But the fact still remains that they have to get the containment building, they have to release some gas, they have all that water to tend with. There is all the unknowns inside here, you know, of systems and back up systems. The problems that they will probably run into when they try and decontaminate the whole place, like the water that got in the air ducts that was radioactive and the water that was released into the river. I don't know. But I know there is a lot of things that they still have to take into consideration and control measures to insure that nothing else happens. So that will be interesting to follow that through.

INT: Have I missed anything?

NAR: Oh, I really don't. I don't believe. You know you can talk about this for days, maybe weeks when you get into particulars.

INT: Yeah, but I want you to be sure that you have said everything that you would like to say about it?

NAR: I believe offhand, I think maybe in summary, and just using Three Mile Island and past experience of previous disasters, I think the Congress of the United States has to, and it is not any more, "hopefully they will". They have to appropriate more monies to develop, or to allow counties and cities to develop a good integrated communications system across the board so that we are able to communicate with local government and with state agencies when the time comes that you have to. This almost has to be a fixed facility type net work located in each municipal building. And until they do that we are still, we still have that, to use the telephone method of doing things and we just cannot rely on the telephone. And there are certainly enough statistics around the United States from past happenings that if they would have had good communication systems they would have been able to say "this has happened" or "that has happened" or "we need this" or "we need that." And see in Ohio, April 3, '74, and their tornado and Rapid City, South Dakota in 72, and Wichita Falls in May of this year. There are just all over the United States. And we have to have good reliable communication systems. Internally I guess is the best way to say it, within each state. And in this state it is the Commonwealth Government, as is Massachusetts, Kentucky, and Virginia. They have all these little local governments that have the same responsibility, and they have to be tied into the communication system so that they can respond and tell you what their needs are or what is happening and not relying on telephones. But I think that's the key for people to be able to communicate the responsible people, and we have to have good warning systems for the public. And I not sure sirens are the answer, or warning devices because of the way buildings are constructed today and sound barriers, insulation of, because of the

energy side, sirens you have to rely on the right wind direction in a lot of case. There is a tremendous difference, between the summer season and the winter season as far as carrying sound. Most people in the United States, when they hear the siren today, think that it is a fire call. They really wouldn't know the difference that that is a signal to turn on your radios and you emergency broadcast system. There is a good system that is in play now and that is the "Know the Weather Radio System, Pennsylvania." We are the second state to have that and they are talking of being the first, but, that was in operation here in the Harrisburg area, maybe you are familiar with it?

INT: No, I am not.

NAR: And there are about 25,000 monitors out there in this area, which it services.

INT: Weather monitors?

NAR: Yeah. And each person can buy one of these for their home for under fifty dollars, and all it is, is a continual tape mechanism that the National Weather Service Provides, and it runs twenty four hours a day, seven days a week. And you can turn it on when you want to.

INT: And get the weather.

NAR: Right. But the ones that should be bought are the ones that are tone activated. The National Weather Service can activate a tone which activates your receiver, which then puts them on the air. And that is used constantly for severe weather statements and things like that. That maybe the answer, a system that parallels that maybe for around Nuke sites. I think it's, I think that is going to be looked into here in Pennsylvania if perhaps, you know the answer. It's like the smoke alarm. Every house should have one. But here again how many do and Americans say my house will never catch on fire so why should I get one. But that jumps on back into building codes, yet. And the state realizes that perhaps this should be mandated. They should mandate it, smoke detectors in every dwelling, every building, and everything. But, and maybe this is a little lengthy for a summarization, I'm not sure there is any elected official that would want to take a project like that on because of the political side and him being defeated. That is one of the great fallacies of a democracy, are the things that should be addressed a lot of times are let go because nobody wants to tackle that kind of a project. It is political suicide. But that part, they are the things that make or break and that's all part of life or whatever. But if elected officials, your congressional side and on the state side, would do what they are charged to do — and that is to be responsible to the general public — they won't have to run around worrying about being re-elected. It is very simple, but once you get in there and are thrown against all these lobbyists, and there is trade offs on votes, I can understand how the whole system works and the guy says "well, I'm not going to get into this." Or I'm not going to do that, it is political suicide. But all we are really asking, I think is that the elected officials address the things that are really life itself and the reality of being able to take care of people when the time comes to take care of them and, you know, you go to doctors when you are sick, they have ambulances to take you there and if you have been

in an accident they have a fire truck to come and put out the fire. But it is a little bit different whenever have to warn thousands of people that something is about to happen or is happening or has happened, and how do you notify them at 3 AM in the morning. Now in the dead of winter, literally impossible. And with what's in, out there today to try and do the job with. You are not even whistling Dixie. So I don't know, but there has to be some device internally in the house that can wake people up or that can call their attention to do something. I'm not sure sirens are the answer. But I think money is to build systems and build programs on the communications side and then warning devices for individual family or apartment complexes or what ever. Sirens are fine for summertime and people outdoors playing softball and running around. That's fine. There certainly is not substitute for that, but we have to have a good educational program across the board in the United States and let the policy... Maybe it is not one hundred per cent but at least its uniform as far as doing some of these things. What we need right now the Civil Defense side, the Pennsylvania preparedness Agency, their budget this year was I think a million dollars. We need about, oh I don't know how many billion dollars more. Billions of dollars more to build these different systems, and if not a reoccurring charge it is. Just to parallel this a little bit, every year they dump, pump billions into welfare. It is a reoccurring, annual event and I'm not talking about that kind of money for communications systems.

INT: A lot of the money would be a one shot deal.

NAR: It is a one shot deal with a small amount of maintenance. And life expectancy of the solid state stuff today and microwave and stuff like that is, oh 8, 10, 12, 14 years. So it is really a one shot deal and the maintenance cost is so low. If they would just take so much money and dump into programs like that. And Lord knows this state ranks number one of disaster happenings of all fifty states.

INT: Is that right?

NAR: Yeah, Agnes, and Eloise, and Johnstown, and Three Mile Island. We are ranked number one. We still don't have a communication system in our county and in the local government throughout the Commonwealth of Pennsylvania. Now I have see the legislators after Agnes say, "Man, we can never have this happen again. We got to address this". And six months it was gone and forgotten about. And Eloise came along, the same thing happened, you know. "We can never let this happen again. We have to address this. We need communication systems." And they let it slide again. Johnstown came along and the same thing happened. Three Mile Island came along and the same thing happened. You know, how many times is it g going to take? These people in Harrisburg now, Bill Scranton in particular I think had a tremendous opportunity to take all these past events and say we are going to do something about this, even if it is a dollar a head tax across the board. Or something, they have got to get the money somewhere to provide these systems to warn the general public and flash flooding is so prevalent in Pennsylvania and has taken so many lives over the years, and the situation was thrown up against hazardous materials and the potential for just a catastrophic event with hazardous materials some day.

INT: Gettysburg thing.

NAR: Yeah, and rail systems as poor as they are and transportation on crowded highways, you have to have communication systems in order to deal with these fine details. So I hope that somebody finally does something, I know I have certainly talked to an awful lot of people, both in state government and the federal government, testified in several commissions, and etc. And I just hope and pray they finally do something. But it would not surprise me if they do not get on it. And that kind of goes back to what I said in the beginning where there is maybe half a dozen counties that have gone above and beyond and we just can't wait. It's the elected officials' responsibilities and we just have to push on with our county tax dollars. If the rest of the counties lag and the rest of the states lag behind, why that's their problem. I guess that's about all.