

## A SMALL TOWN THAT CONSIDERED & REJECTED VOLUNTEERING FOR AN MRS STUDY

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### ABSTRACT

The Nuclear Waste Policy Act Amendments (NWPAA) was passed in December 1987, and the Nuclear Waste Negotiator, Mr. David Leroy, was confirmed and appointed in August of 1990. As Mr. Leroy began to form his organization, he established a key policy: his Office would not guarantee that it would find a site, but his Office would be the guarantor of the volunteer process. We very much agreed with this policy and concluded that we should approach a small town adjacent to an available and technically promising site and suggest that they study the pros and cons of volunteering for the MRS.

We recommended to the Mayor that we apply consensual negotiation and open discussion approaches (1,2,3) with all stakeholders to determine if the town and surrounding communities wanted to go forward. The Mayor agreed and we started the process of identifying stakeholders. At the request of the Mayor, we also presented the idea to a small group of citizens he identified so that he could get an idea of their reaction. Opposition, fanned by persons from outside the community, immediately arose and the Mayor decided not to go forward, before all stakeholders had even been identified, and without giving the process a chance to work.

Why did we fail? We had planned an approach "by the book," and we drew on the experiences of others. We had a good knowledge of the site, the town, and the townspeople. Our approach was different than those taken in Grant County and Fremont County - apparently the MRS will not be sited within these counties either. Lessons learned? We're not sure we can offer any lessons; we do offer some observations as to what we might and might not do again.

### BACKGROUND

With the passage of the Nuclear Waste Policy Act Amendments (NWPAA) in December, 1987, I thought, as did many others, that the volunteer provisions and the establishment of the Office of Nuclear Waste Negotiator contained in Part D offered, at last, a way to move forward and provide a site where DOE could accept spent nuclear fuel and high level waste at the earliest possible date. Having been a proponent of nuclear power, to the extent that nuclear and spent fuel engineering and project management were my chosen profession, I believed that the NWPAA now offered a significant opportunity to help solve the national radioactive waste problem and help restore public and investor confidence in the use of nuclear power for commercial electricity generation.

Following DOE's 1989 MRS systems study which reaffirmed the usefulness of the MRS, I discussed the idea of a project with a colleague and consultant, Mr. Arnie Wight, President of Principled Negotiations, Inc. We agreed to enter into a project to identify a potential site with a community that might want to volunteer to the Nuclear Waste Negotiator to be a host for the MRS. In doing this we decided that we must follow these principles:

- We would identify all the stakeholders that we could and follow the principles of voluntary, open and consensual negotiation and risk communication published by Susskind, Fisher, and the National Research Council (1,2,3), and utilized by the Clinch River MRS Task Force and the Canadians (Fig. 1);
- It would be strictly the community's decision to determine if they wanted to go forward. We would describe to them the law, the need, and technical information available from DOE and the NRC, and

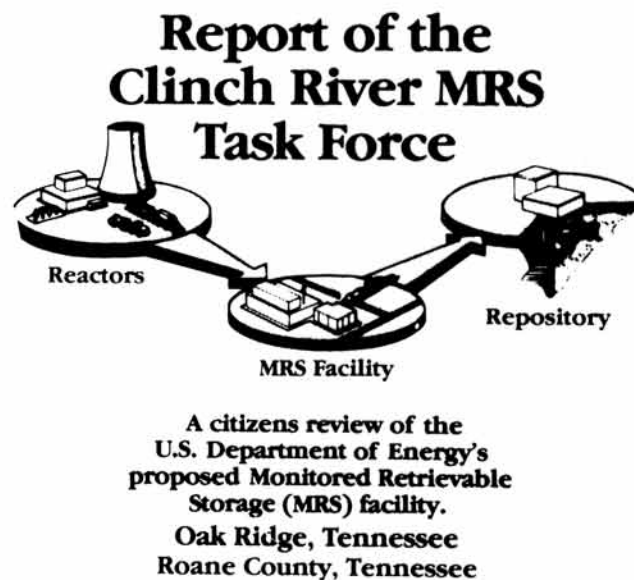


Fig. 1. We studied the Clinch River MRS Task Force and the Canadian siting processes.

- offer to facilitate and mediate and provide technical resources to help them study the pros and cons;
- For the issue to come to the stakeholders in an open manner so that it could be discussed and debated would require the leadership of an elected official or a well respected local citizen; either must have a reputation for fairness. We would follow the leadership of this individual as eventually an elected official would have to apply for a grant for the affected unit

of local government under Section 406.(b) of the NWPA.

- We felt that chances of successfully finding a community that would agree to study the issues would be enhanced if we could work in a region or location of which we some knowledge.

We found such a place!

### THE SITE, THE COMMUNITY, AND THE MAYOR

The site on which we focused lay about 130 miles northwest of Pittsburgh, Pennsylvania, in the northeastern corner of the State of Ohio in Ashtabula County, and in the northwestern corner of Pennsylvania in Erie County (Fig. 2). The USX Corporation has owned the site for many years and has been trying to sell it to developers to provide employment for the adjacent communities including the city of Conneaut, Ohio (Fig. 3). While USX had donated parcels to a major conservation organization, the Western Pennsylvania Conservancy, approximately 600 acres were still available. USX agreed to cooperate and advised us that they had been actively cooperating with the community in trying to find potential developers and buyers. This community had steadily been losing industries and jobs and wanted to reverse that desperate trend. The corporation provided maps, took me on a tour of the site (allowing me to video-tape it), and arranged an introduction with the Mayor of Conneaut, Ohio. I could see that the site had a number of technical advantages as shown in Figs. 2, 4, and 5.

My first telephone contact with the Mayor was extremely encouraging. Even after we explained that the potential use for the property involved the "N" and "W" words--"Nuclear" and "Waste," he wanted to hear more and requested that we come to Conneaut and meet with him. He reiterated that the city needed more industry and confirmed that he and USX Corporation had been trying to find developers for the site. At this point, we felt that we had met our major criteria, and were especially encouraged to be able to meet with an elected mayor of an *affected unit of local government* who was anxious to develop the site to provide jobs and tax revenues for Conneaut. The Mayor also felt sure that the school superintendent would support the idea even with an elementary school located near the site.



Fig. 2. The site is well situated with respect to eastern nuclear power stations,.

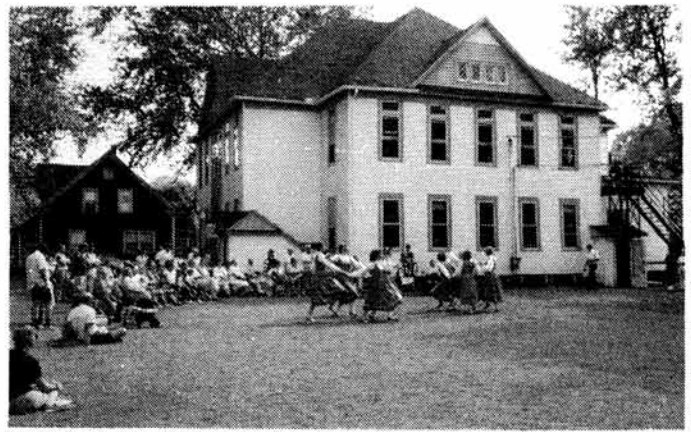


Fig. 3. Conneaut, Ohio, is an attractive, small mid-west city.

### PREPARING TO MEET THE MAYOR

- We reviewed our tentative plan with DOE's Office of Civilian Radioactive Waste Management and the Nuclear Waste Negotiator. We, of course, requested no formal approval; we were only looking for any "show stoppers."
- We performed a preliminary review of what we felt were key safety considerations, based on the OCRWM's siting criteria (Fig. 6). Our review included:
  - The 1986 NRC Staff Safety Evaluation (4), and the 1989 MRS Commission Report (5). We concluded that the positive safety conclusions were sufficiently generic to apply to the Conneaut site.
  - Seismic motion. Five operating nuclear power plants are located within about two hundred miles of the site (Fig. 5). The NRC Safety Analysis Reports showed the Conneaut site to be located in a region of very low seismic activity.
  - Emergency planning and evacuation. The Perry Nuclear Power Station of the Cleveland Electric Illuminating Company (Fig. 7), is located about 30 miles from the site and has NRC approved plans.
  - Transportation and highway safety. Two major railroads and two major highways provided a sound transportation system that should minimize problems. Also, the nearby Perry Nuclear Power Station with several years of experience in shipping nuclear fuel and low level radioactive waste should help. Highway and transportation safety were, nevertheless, significant concerns to the citizens.
  - Wetlands. From our prior knowledge of the this area and my site visit, we expected that the site might contain significant areas of Federally-designated wetlands. We obtained Fish & Wildlife Service inventory maps and confirmed that it did indeed contain over 50% wetlands. This discovery was a serious potential show stopper! We then reviewed our plan with a well respected conservation organization, The Western Pennsylvania Conservancy (Fig. 8). From this meet-

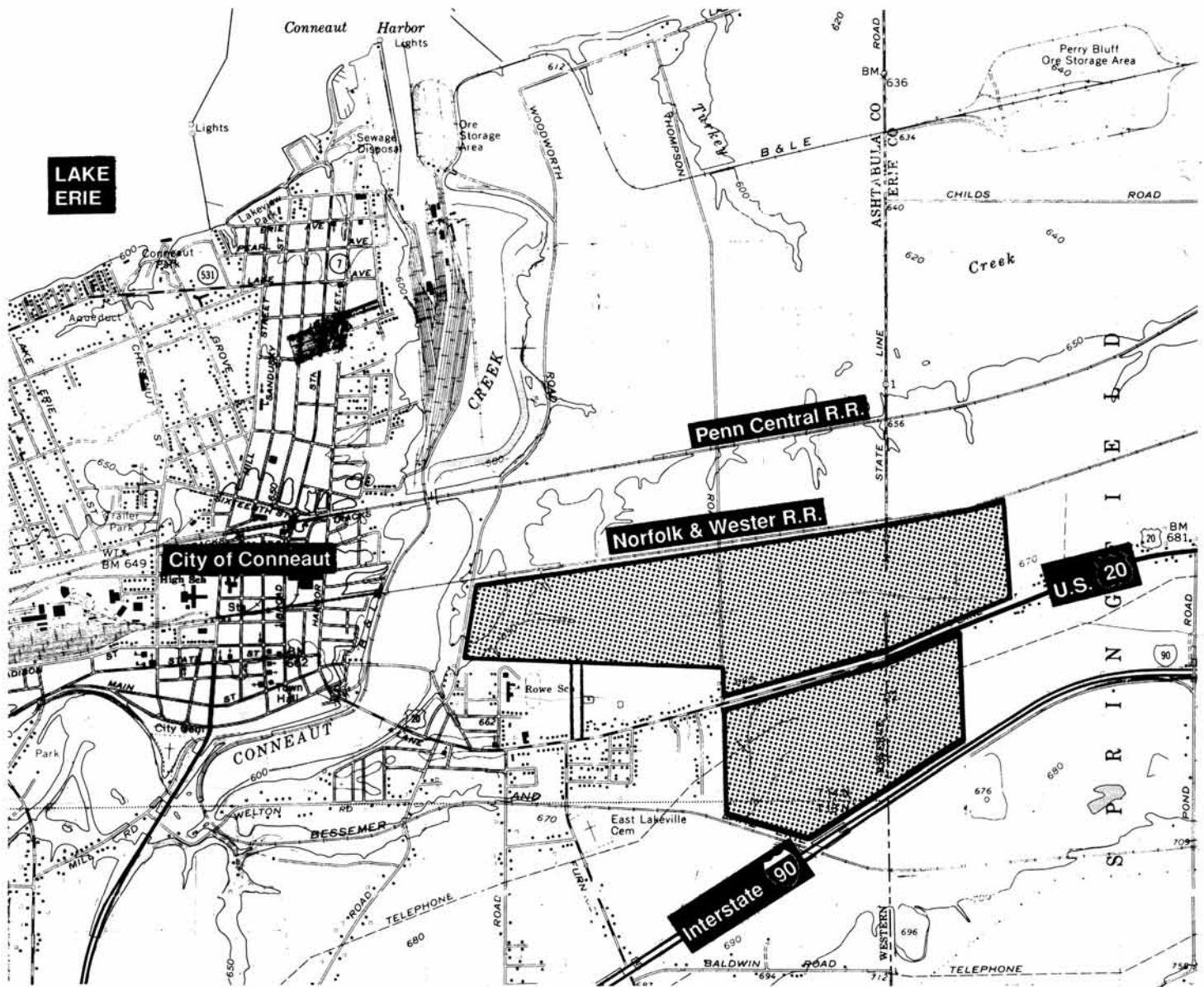


Fig. 4. The site is located between 2 major railroads and a U.S. and Interstate Highway along the border of Ohio and Pennsylvania.

ing, we developed an idea that could possibly mitigate the wetlands issue. Under the NWPAA, an agreement could be negotiated, and funding provided to either replace the wetlands and/or establish, in Conneaut, a national center for study of wetlands. The Conservancy indicated that such a center would be valuable to the national objective of maintaining wetlands. We then felt that we had something extremely positive to suggest to Conneaut, and to regulators; it seemed an idea tailored to the negotiated agreement provisions of the NWPAA.

#### FIRST MEETINGS

Late in the fall of 1990, we met with the Mayor and the Director of Industrial Development for Ashtabula County, Ohio. Since they had no knowledge of our subject, we briefed them on all aspects of the generation of electricity from nu-

clear power, how this national objective has led to the accumulation of spent nuclear fuel, and how Congress had provided a solution through the NWPAA. We also covered the problems of disposal of high level waste, and basic safety considerations. We reviewed the NRC safety evaluation (4) and MRS Commission report (5).

We then covered the provisions in the NWPAA for the Office of Nuclear Waste Negotiator, the benefits, and the negotiated agreement. We provided them with copies of the Office of the United States Waste Negotiator 1990 "Background Information Packet." By that time, we had met David Leroy, were impressed with his capabilities and vision, and felt very confident in assuring the Mayor that Mr. Leroy had firm convictions and would assure a voluntary process from which a community could withdraw at any time.

As it turned out, the final debate among the Mayor and his steering group focused on this crucial point, as a number



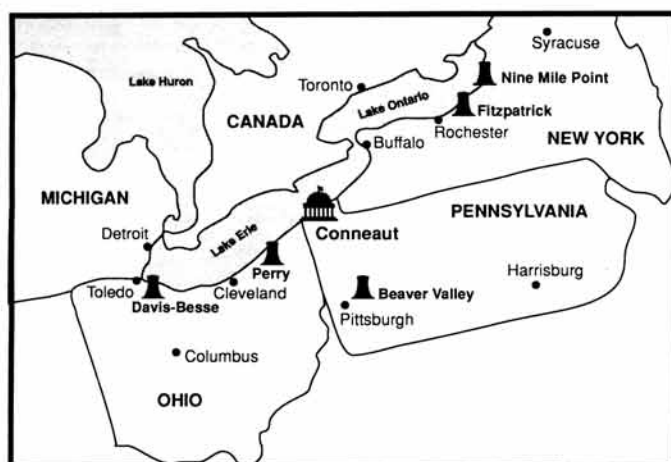


Fig. 5. The safety reports showed that existing nuclear power stations surrounding Conneaut have extremely low and licensed seismic design criteria.

of citizens would not believe that the process could be made voluntary.

Finally, we took great care to apprise the Mayor of the downside. We warned him that the process would be contentious. Citizens would and should be greatly concerned over environmental issues and transportation accidents. From our personal experience, we advised him that issues of radioactivity and waste evoke strong emotions. Finally, we said that he should be prepared for pickets and for outside protestors.

Of course, all these prophecies came true.

## TWO IMPORTANT DECISIONS

After three meetings in which we reviewed the pros and cons, the Mayor decided that the MRS held great promise for Conneaut and that he would pursue an open process within the community to determine if a consensus could be reached to ultimately request the governor to enter into it. Up to this point, our discussions with the Mayor had been confidential; if he had not wished to pursue the idea, we would have said "thank you for your time" and dropped the idea.

The Mayor then decided that he wanted to get the views of "several" more citizens of Conneaut--still on a confidential basis. Arnie and I debated this decision. On the one hand, more data from the community would be useful to the Mayor; on the other hand, we knew that the process must be open. We had already been in contact with the Mayor for five or six weeks, and knew that sooner or later, leaks to media would occur. Knowledge or perception that the Mayor was making confidential "deals" would, we were certain, kill the idea before it could even be explained, and also damage his reputation. The Mayor finally decided to pursue this course of action, and Arnie and I really had no choice but to support him.

## A CITIZENS' STEERING GROUP

In January of 1991, the Mayor confidentially contacted 17 or 18 citizens of varied backgrounds who agreed to meet to hear the idea of an MRS for the Conneaut site. In a typical northern Ohio snowstorm, we traveled to Conneaut in late January to meet with the Mayor, the development director, and the citizens--the meeting still to be confidential.

SITE REQUIREMENTS		STATUTES		REGULATIONS		EXECUTIVE ORDERS	
Colocation with a geologic repository		7 U.S.C. 4201 et seq.		7 CFR Part 658		Executive Order 11593	
Site size		16 U.S.C. 1 et seq.		10 CFR Part 72		Executive Order 11988	
Single-use protected lands		16 U.S.C. 431 et seq.		10 CFR Part 100, App. A		Executive Order 11900	
Coastal barriers		16 U.S.C. 461 et seq.		10 CFR Part 1022		DOE ORDERS	
Critical habitat for endangered or threatened species		16 U.S.C. 469 et seq.		36 CFR Part 293		DOE 4320.1B	
Hazardous wastes		16 U.S.C. 470 et seq.		36 CFR Part 296		DOE 5700.2C	
SITE CONSIDERATIONS		16 U.S.C. 470aa et seq.		36 CFR Part 800			
Natural seismic hazards		16 U.S.C. 521 et seq.		40 CFR Part 264			
Induced seismicity		16 U.S.C. 668 et seq.		43 CFR Part 7			
Surface faulting		16 U.S.C. 668dd et seq.		43 CFR Part 2800			
Floodplains		16 U.S.C. 703 et seq.		43 CFR Part 8560			
Ground stability		16 U.S.C. 1131 et seq.		50 CFR Part 29			
Volcanism		16 U.S.C. 1240 et seq.		50 CFR Part 35			
Other extreme natural phenomena		16 U.S.C. 1273 et seq.					
Human activities		16 U.S.C. 1331 et seq.					
Wetlands and coastal zones		16 U.S.C. 1451 et seq.					
Preservation of ground-water quality		16 U.S.C. 1531 et seq.					
Preservation of air quality		16 U.S.C. 3501 et seq.					
Protected species		23 U.S.C. 138 et seq.					
Historical, cultural, or archaeological resources		42 U.S.C. 300f et seq.					
Land use and ownership		42 U.S.C. 1906 et seq.					
Transportation		42 U.S.C. 7401 et seq.					
Cost and development time		42 U.S.C. 10101 et seq.					
		43 U.S.C. 315 et seq.					
		43 U.S.C. 1701 et seq.					

Fig. 6. The Conneaut, Ohio, site should be able to meet DOE's siting requirements.



Fig. 7. The nearby Perry nuclear power plant was considered a good neighbor and one which provided enormous tax revenues to the next county. Its NRC-approved emergency plans were a plus in our favor.



Fig. 8. Wetlands were a potential show stopper until we consulted with conservationists who suggested a solution.

## Electricity from Nuclear Energy

1990-91 Edition

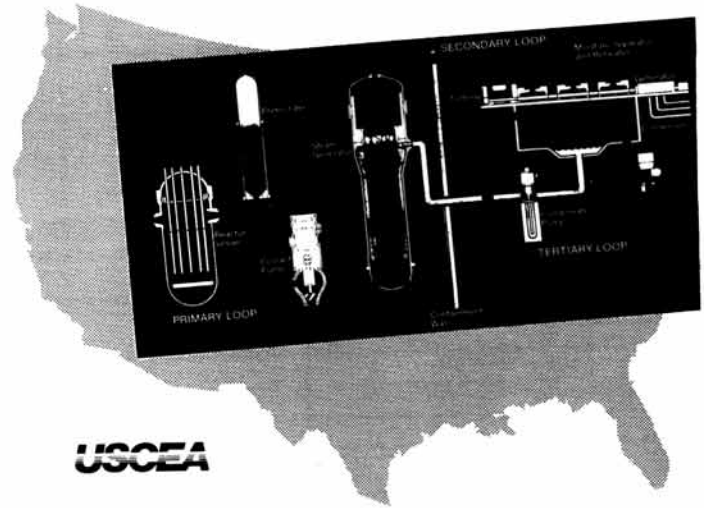


Fig. 9. We started at the beginning by explaining the purpose, design, and waste products of nuclear electric generating stations.

At the Mayor's request, we made a presentation from overhead slides. In addition, we had prepared a booklet of hand-outs. We started with "why nuclear power" (Fig. 9) and explained the solution devised by Congress to dispose of nuclear waste. We explained the mission and design concept of the MRS, and reviewed the positive safety conclusions.

We explained the function of David Leroy and his office and emphasized the fairness with which we believed he would conduct any discussions or negotiations. We gave them the article as well as the Information Packet and other materials prepared by his office.

We discussed in detail the "Benefits" provisions from Sections 170 and 171 of the NWPA. We went through the consultation and financial assistance provisions of Sections 403 and 406 and provided copies of them.

Finally, we listed the following advantages and disadvantages:

### Advantages

- Safe, clean facility
- Must be licensed by U.S. Nuclear Regulatory Commission (NRC) and meet all Federal, State, local laws and regulations
- 300 acre facility with approximately 500 jobs
- Visitors' Center
- Federal government will own. Contractor-operator licensed by NRC
- Grants for financial assistance to mitigate adverse impacts
- Infrastructure industries
  - Architect-engineering services
  - Manufacturers of casks, trucks

- "Spinoff" specialty high-tech contractors
- VIP visits
- Training for technical skills
- Possible benefits obtained through negotiation:
  - Shared control
  - Co-locating with additional Federal projects
  - Higher education centers of excellence; world class centers of technology
  - Federal government purchase of land for wild-life refuges, national center for wetlands studies, etc.

#### Disadvantages

- Citizen concerns over impact of:
  - Influx of new workers
  - Influx of construction activities
  - Additional public works and residents on schools, roads, infrastructure
- Citizen and environmental groups concerns over impact on environment
- Wetlands drainage
- External groups that will use extreme methods to stop nuclear power, energy development

During this meeting, we were asked many tough questions, but always courteously and fairly. The people in the meeting thought that the Perry Nuclear Power Station was indeed a good neighbor, and that its example together with some of the design and licensing features we explained (Fig. 10) gave them some confidence. Not unexpectedly, they were concerned about transportation safety, the wetlands, contamination of drinking water, and Lake Erie with its sports fishing businesses. Even though they were polite, it was apparent that some people had strong concerns and would strongly object to the MRS. But we expected that.

#### DECISION TIME AGAIN

At the end of the meeting the Mayor asked the group to return in one week to give him their views after they had a week

to think things over--and to keep the meetings confidential. That was not the approach we wanted to take, but the process was the Mayor's. Even though we felt there was little chance that the process could remain confidential for another week, we agreed to return in a week to meet with this group again.

Sure enough, the story was leaked to the local paper, and Mayor started to get questions. However, he asked the paper to wait until after the next meeting to report on the project when he would have a decision to announce. He had previously told us that the paper would deal with him fairly, and, in our opinion, it did so (Fig. 11).

#### THE PROCESS AND PROJECT IS ABANDONED

We returned the next week to a tense situation. The local hospital where the previous meeting was held called the Mayor in the afternoon of the scheduled meeting and told him they could not hold a controversial meeting on their property, especially since pickets were expected.

The Mayor arranged with his church for a meeting room and during the meeting the Mayor told the pickets several times that it was private meeting, on private property, and they could not attend. As far as we know, they were local people, but it was amazing how fast they came up with the standard anti-nuclear power slogans and skull and cross bones symbols!

After much discussion, again in a controlled and polite manner, the arguments against the MRS came down to one major point:

- Even with provisions of the NWPAA, and the best efforts of the Nuclear Waste Negotiator to fulfill the provisions of the NWPAA, how could they, a small town in Ohio, protect themselves and compete with the Federal government when it really wants something? If it (DOE) starts negotiations with them, and especially if DOE gives them study money, at some point DOE would go to Congress to change the law and Conneaut would be stuck, like it or not.

After listening to the arguments for a couple of hours, the Mayor decided that he felt the process would be too divisive for Conneaut. He called in the pickets and told them (there were only five or six) that he was so advising the paper. So there we were at the end of our project, pretty disappointed, and with all our technical evaluations mattering not one bit!

#### BUT THE FAT LADY HAD NOT YET SUNG AND SOME OBSERVATIONS

Actually, the process continued on for a few more months. Some citizens were upset that the Mayor had made a premature decision; they felt that he should have continued the process (Fig. 11). A committee continued to discuss the project, and we got calls from time to time for information. We understand the committee also contacted the American Nuclear Society and OCRWM for information. But without any strong leadership, the committee could not develop a consensus, and I believe the City Council finally took a vote against it.

We're not sure that any lessons can be learned from our experience, but we can offer a few observations:

- One of our principles was that we should be unbiased and help the stakeholders identify problems so that they could address them openly and determine if the problems could be solved to their satisfaction. To fulfill this principle, we felt that we should not go to

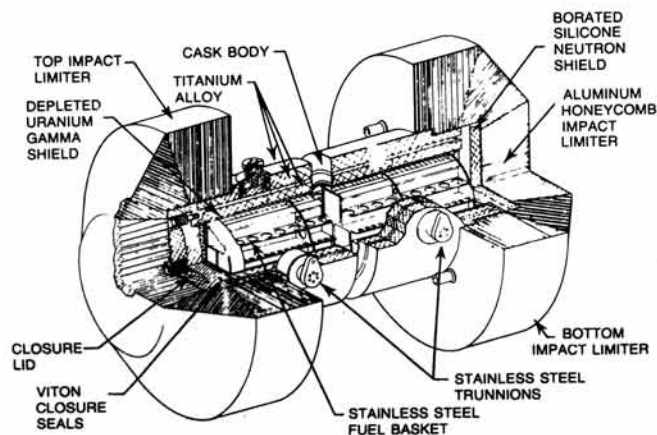


Fig. 10. People were very interested in many of the high tech design and safety features, such as this cask. (DOE/RW-0255)



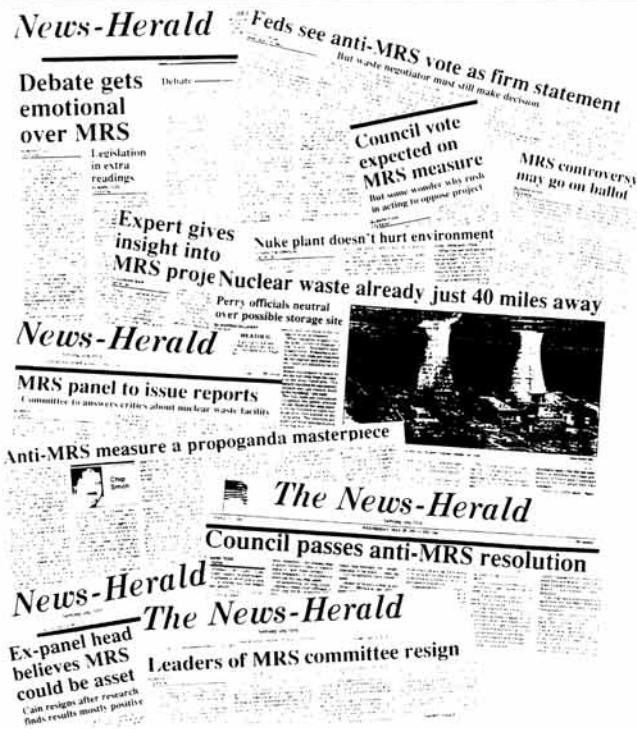


Fig. 11. The local newspaper presented balanced reports, and even after the mayor withdrew a spirited public debate continued, in the best American tradition.

Conneaut with pre-packaged answers. On the other hand, to meet with the Mayor without having obtained some indications that the site might be licensable would waste everybody's time and needlessly stir up the community. Doing homework meant that we became, in fact, biased in favor of the site. We can only suggest that you must be straight forward, come forth with all the information that is available, and answer all questions.

- What we failed to grasp early enough was the not untypical situation where one of the parties was viewed by the other as much more powerful, and could not be trusted under any circumstances--the classic roadblock to any negotiation. Given this, the

negotiations proceeded only a step or two. Such is the stuff of wars.

- In contentious situations it seems that people who oppose a project are much more vociferous than those who would support it. At the last two meetings in Conneaut were supporters and those who seemed neutral and who might have been willing to let the consensual process go forward--but they could not, or would not assert themselves. Thus, even though it might have been there, the Mayor could not find his consensus, and felt compelled to stop the process, as it, in his words, would have been "too divisive to the community."
- We believe that to be successful you must have a strong local sponsor, preferably elected, who will persevere and insist that all sides be heard in an open, democratic process.
- Finally, we are reminded that a great many Americans of all backgrounds have strong fears and distrust of nuclear energy and its applications. There are also strong feelings against wastes of any kind. Siting of any waste or nuclear facilities will continue to present extremely difficult problems, regardless of Congressional legislation.

#### REFERENCES

1. LAWRENCE SUSSKIND and JEFFREY-CRUIKSHANK, *Breaking the Impasse*, Basic Books, Inc. (1987).
2. ROGER FISHER and WILLIAM URY, *Getting to Yes*, Harvard Negotiation Project, Penguin Books (1987).
3. *Improving Risk Communication*, National Research Council (1989).
4. *Staff Evaluation of U.S. Department of Energy Proposal for Monitored Retrievable Storage*, NUREG-1168, U.S. NRC, Office of Nuclear Material Safety and Safeguards, pp. 3-101,102 (March 1986).
5. *Nuclear Waste: Is There a Need for Federal Interim Storage?--Report of the Monitored Retrievable Storage Review Commission*, pp.29-45, (November 1, 1989).