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The Faces of **Decommissioning** and Site Cleanup

How "People" Issues Affect Work Progress

By Lara Harrison

n August 6, 1997, the board of directors of the ' lion a year, and the people of Wiscasset are picking up Maine Yankee Atomic Power Co. elected to permanently close Maine Yankee, a nuclear power plant located in Wiscasset, Me. Economically, Maine Yankee was no longer viable, so they decided to shut it down. At its peak, Maine Yankee provided approximately 90 percent of the town's tax base (\$20 million a year), and most of the industry in Wiscasset revolved around supporting the nuclear plant. The town, which had the best schools, new fire trucks, and a strong economy, was suddenly faced with the eventual loss of hundreds of jobs. Today as Maine Yankee undergoes decommissioning, the plant pays taxes of only \$2.5 mil-

the pieces of their once prosperous town.

Scores of nuclear facilities across the United States are currently in various stages of decommissioning. We read about the successes and lessons learned of various projects—how some new technology will increase productivity or improve worker safety. While these are valuable and important aspects of the decommissioning process, nothing is more important to the success of a decommissioning project than the support of key project stakeholders. It is vital to recognize that many groups of people are affected by decommissioning and cleanup projects—employees, community members, regulators,



▲ Keeping workers motivated at cleanup and closure sites is a key element of success. During the celebration to mark the successful demolition of Building 779 at the Rocky Flats Environmental Technology Site, Energy Secretary Bill Richardson praised the "hard work and dedication of the workers at Rocky Flats.

to name just a few-and they all have a stake in the closure of these sites.

The responsibility and challenge of nuclear industry leaders involved in decommissioning projects is to go beyond leading edge technology and to proactively identify all of the central stakeholders.

teer community organizations and interested individuals, local business owners, paid oversight committees, state and national regulatory organizations, and more. Managers at nuclear decommissioning sites must develop and implement strategies to build and nurture effective and useful relationships with stakeholders, which will aid in the safe and ecologically prudent closure of these facilities.

Employees— "On the Point" **Stakeholders**

When a nuclear facility is slated for decommissioning, how does project leadership achieve worker support? Employees of nuclear sites are often overlooked as important stakeholders in the decommissioning process. Workers have the ability to make or break any project. How can they be motivated to work themselves out of a job?

According to Ken Powers, former plant manager of Big Rock Point, a nuclear power plant currently undergoing decommissioning in Charlevoix, Mich., managing issues of a closure workforce is a full-time job. "There are so many emotions involved in shutting down a plant, including a lot of anger and uncertainty. Generally, the culture Key stakeholders can include employees, local volun- of the people who work at nuclear sites is that their entire career is spent at a site, and

oftentimes they are one of several generations who worked there," says Powers. "They have deep roots in the community, and when a site faces decommissioning, you are ripping the roots out from under them.

"The nature of the shutdown makes a difference," continues Powers. "At Big Rock, we shut down simply because it was no longer economically feasible to continue production. We were the longest running nuclear power plant in the United States. Our employees were able to finish their jobs with their flag flying."

Other decontamination and decommissioning (D&D) sites haven't been as fortunate as Big Rock Point. Many nuclear facilities were shut down for safety reasons but then were never restarted.

At Millstone-1 in Waterford, Conn., operations were curtailed in 1995 by safety and configuration control concerns, and restart proved to be too expensive. By the time Bob Fraser arrived at Millstone as



▲ Today's D&D workers are pioneers in their field. Here, Steve Foster (left) is being fitted with teledosimetry by Randy McDowell before going to work on Big Rock Point's Control Rod Drive Removal Project.



▲ Future land use is a big stakeholder issue. An interagency agreement between the DOE and the U.S. Fish and Wildlife Service sets aside approximately 800 acres of the 6000-acre RFETS Buffer Zone for the Rock Creek Reserve, which will provide habitat for threatened and endangered wildlife along central Colorado's Front Range.

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to rectify the situation, a decision was made to transfer plant, recognizing the important contributions of the workmany of the employees left at Unit 1 to Millstone-2 and · ers who gave it life, honoring their specific skills, and then -3 and hire all new employees to decommission Unit 1.

"I felt kind of like the grim reaper when I went to Millstone," recalls Fraser. "I had come from Maine Yankee where I had worked for several months to get operations started again, and I ended up implementing the decommissioning plan, essentially ending the jobs of hundreds of workers. When I got to Millstone, the employees were in limbo as to what their jobs were anymore, and here I was in charge of writing the decommissioning plan to shut the place down. At least they finally knew what was going to happen, and many of them were able to find work next door at the sister units."

A major decision in the transition from an operating facility to one undergoing decommissioning is the question of who will perform the D&D work. At some decommissioning sites, the process knowledge of the workforce is an essential part of planning and executing decommissioning activities. The workforce must be retained and retrained to perform D&D. Many workers must learn new skills and face major career changes in order to keep their jobs for a few more years. During this process, some lose their identities as highly skilled crafts- or tradespersons. Ironically, the workforce must learn to take apart what they once put

Workers at the Rocky Flats Closure Project in Golden, Colo., have begun the transition from being process specialists who once helped create the "triggers" of nuclear weapons to joining the generic job classification of D&D workers. For many, the transition is not easy.

the decommissioning director, morale was low. To begin agement to encourage workers to celebrate the life of the allow the workers to mourn its passing."

Working Yourself Out of a Job

The million-dollar question workers at decommissioning projects have is "When will my job be over?" When workforce members are faced with the imminent closure of their workplace, foremost on their minds is "What about me?" This distracts the workforce from the work at hand and can cause potential safety problems. Project leadership must manage change and uncertainty by educating the workforce about the decommissioning plans, pinpointing a time frame when their jobs will be over, and providing workers with the tools to plan for their futures.

"At Maine Yankee we set up a process by which all employees received a 60-day notice, and every six months management met one-on-one with every employee to go over staffing projections for the next six months," says Fraser. "A career transition center was opened to provide job counseling, help with résumé writing, and assist with job placement. A voluntary severance package was offered, and we were able to transition from 547 employees to around 100 with minimal use of an involuntary separation process."

Fort St. Vrain, in Platteville, Colo., is the first (and only) U.S. nuclear power plant to have successfully completed decommissioning following a substantial com-"In the lifecycle of a nuclear site, the transition to D&D is mercial operating history. Fort St. Vrain owner Public obviously a turning point as we prepare for the 'death' of Service Co. of Colorado completed the decommissionthe site," says Powers. "I believe it is appropriate for man- ing project ahead of schedule and under budget. You can't assume
you know how
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to stakeholder
concerns,
because they
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A. Clegg Crawford, a vice president of the utility during the decommissioning, credits the retention plan offered to employees as a big reason for this success.

"The employees helped develop their retention plan," says Crawford. "Every employee was given 90-days notice that their job was going away. It came down to three options—continue employment with Public Service, early retirement, or a one-year severance package. We were able to control our staffing level as it went from 527 to 11 with less than 1 percent uncontrolled turnover."

Decommissioning nuclear sites across the country have

created a whole new job market. D&D workers are pioneers in their field, paving the way for others to follow in their footsteps as more sites begin the decommissioning process. Workers are also building their résumés by learning new skills that they can refine and teach others if they choose to continue this work at other facilities.

External Stakeholders

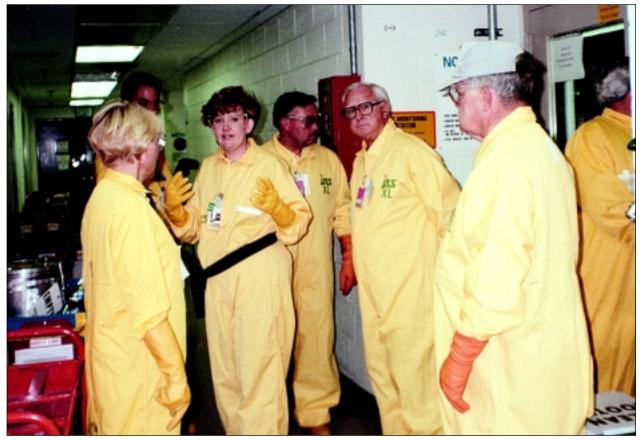
Stakeholders, if they have the will, can stop any project. Project management is allowed to do only what the stakeholders will allow them to do. Take for example the decommissioning project at Fort St. Vrain. Public Service Co. of Colorado wanted to build an independent spentfuel storage installation (ISFSI) to temporarily store spent fuel until a repository became available. The state of Colorado, a regulatory stakeholder in the decommissioning process, refused to agree to this proposal, fearing the fuel would stay in the state forever. After a period of

negotiations among the U.S. Nuclear Regulatory Commission, the state of Colorado, and the utility, they signed a tri-party agreement. The state was granted a "backstage pass" to Fort St. Vrain so that officials could observe everything going on throughout the cleanup process. As a result, the ISFSI was constructed.

> In 1995, Rocky Flats officials introduced the first draft of an accelerated closure



Open houses and family activities at closure sites can help community members learn more about ongoing decommissioning and cleanup activities, making the work more familiar and less threatening.



▲ Educating public officials about the work in progress can lead to improved community relations. Here, local officials tour Rocky Flats.

plan to local stakeholders. While the plan to decommission the plant was widely accepted and in some cases embraced by stakeholders, some of the details of the plan were not acceptable to key stakeholders. The plan called for low-level waste to be disposed of at Rocky Flats. The majority of the stakeholders demanded all wastes be shipped offsite or stored in aboveground storage units until a safer disposal option was found. It didn't take long for the Rocky Flats closure plan to call for all wastes to be disposed of at offsite facilities.

Successful decommissioning requires compromise and collaboration with all stakeholders who have a vested and legitimate interest in the project. "Generally, public support of construction projects far exceeds their support of deconstruction projects," says Powers. "Construction generates revenue and jobs for a community, usually boosting their economy. Decommissioning projects potentially take away that money, and people end up losing jobs as a result. Big Rock was the biggest taxpayer and employer in the city. When we shut down, you'd better believe there were many people interested in what we were doing." In fact, after Big Rock Point ceased operations in 1997, tours of the plant tripled during the next three years.

When dealing with the decommissioning of a nuclear facility, many questions arise and many issues are brought to the table. What will the impact of this decommissioning project be on the local economy and the future of the area? How will the community make up the loss of tax revenue? Where will all of the waste be stored and shipped? How will you protect the water? What are the soil cleanup levels and are they stringent enough to allow for community reuse? How will

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the land be used once the site is gone? Is there adequate funding available to ensure the site will be cleaned up to a green field? It is important to identify each stakeholder's motivation and interests in order to build a relationship strategy for both friendly and unfriendly stakeholders.

"We always had antinuclear groups concerned about our operations. Once we were shutting down Big Rock, the antinuclear groups were not always happy about our closure plans either," says Powers. "You can't assume you know how closure will play to different stakeholder groups. You always need to be listening and to be re-

▶ Citizen advisory panels or boards serve both the community and the cleanup site. Here, Big Rock Point Citizen Advisory Board members (from left, Jacki Merta, Charlevoix Chamber of Commerce executive director; Mike Weisner, Charlevoix city manager; and Don Smith, Charlevoix County Board of Commissioners) listen to a presentation on plant activities.



sponsive to stakeholder concerns, because they matter."

Many stakeholders have no nuclear background and need to be educated in order to understand the issues of nuclear decommissioning. Holding public meetings on a regular basis is an effective vehicle for management to communicate decommissioning plans, answer questions, and really listen to what issues the stakeholders are interested in.

"At Big Rock, we had people concerned about how we monitor for radiation if you can't see, smell, or taste it. We brought in high school teachers to educate stakeholders about radiation and other issues. We found it was better to use as many outside sources as we could while we educated the public because we

were still trying to build trust with our stakeholders," explains Powers.

them to do.

At Maine Yankee, a Citizen's Advisory Panel (CAP) was formed in 1997 to enhance opportunities for public involvement in the decommissioning project. Members of the CAP had to be educated in many subjects such as radiation, site characterization, used fuel storage, the decommissioning process, and decommissioning funding before they could get off the ground. The panel includes a diverse group of people who represent a variety of different viewpoints, including the president of Maine Yankee and State Sen. Marge

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Kilkelly. The Maine Yankee CAP, like many advisory boards found across the United States, now serves as a community liaison and as an adviser to Maine Yankee on issues of concern to the local community. The CAP also communicates directly with federal regulators such as the NRC, which gives the CAP quarterly oversight updates.

Communicate, Communicate, Communicate

"I believe stakeholder groups like the CAP are a valuable communication tool in the decommissioning process," says Fraser. "They keep the communities informed so the 'scare factor' is not as high. Good relationship building can avert stalls and stalemates in getting plans accepted and implemented."

"We launched a comprehensive communication plan aimed at the communities around Fort St. Vrain when we started the decommissioning process," says Crawford. "We sent out questionnaires, every six months we briefed the commu-

nities, and we held open houses so stakeholders could see for themselves what was going on."

"Developing relationships with stakeholders requires honest and authentic attitudes and behaviors. We must truly care about the stakeholders and their perspectives. We can't fake it," adds Powers. "There is no magic bullet. Every project has different people with different issues. We all have to work together in order to make our decommissioning projects successful."

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