

UNITED STATES OF AMERICA

DEPARTMENT OF COMMERCE

In the Matter of

Consumers Power Corp. et al.

Docket Number 50-155

Big Rock Point Nuclear Power Station

Spent Fuel Pool  
Expansion

Motion of John O'Neill II for Clarification  
of Legal Language

John O'Neill II, an intervenor who represents himself without regular legal help, simply requests that the Board require all other parties, and Board itself, in all documents prepared for this proceeding provide a simple explanation of all Latin or legal terms used.

Such an explanation should be simple and direct, and would best be placed out of the body of the motion in a footnote, or accompanying letter. I am not a lawyer, and am puzzled by such expressions as inter alia, infra, slip on, supra and so on. I am contributing significantly to the record in this proceeding, and such language hampers my participation. Because of my limited finances, I cannot afford a special dictionary. Should the licensee object due to inconvenience, I shall be happy to accept a legal dictionary as a gift and drop my motion.

Sincerely

*John O'Neill II*

John O'Neill

Route 2, Box 144

Maple City, Michigan 49664

Copies sent to all on service list.

8004140059

# No more nukes, utility hints

(Related story on Page 7)  
MIDLAND, Mich. (AP) — If Consumers Power Co. knew in 1967 what it knows today about building its nuclear plant in Midland, the massive project never would have left the drawing board, a top official of the utility says.

"If we had known all the problems, the risks, the headaches, you can bet your life we wouldn't have proceeded," Stephen Howell, senior vice president for project engineering, said Thursday after announcing the utility has decided to forge ahead with construction of the controversial plant.

Any other utility contemplating a nuclear power venture should "look at other options until the situation stabilizes," Howell said.

The cost of the Midland project was estimated at \$250 million when it was born in 1967, with completion of the first of two nuclear units due in 1974. Now, the estimate is \$1.1 billion with completion of the first unit in 1981.

And, "there's no guarantee of what's going to be required to complete this plant," said Howell, who blamed most of the cost increase and construction delay on changing government regulations.

"The rules of the game are not constant," he complained.

But with \$1.3 billion invested already, Consumers' board of directors considered options including abandoning the project and scrapping it down, then decided to go ahead, Howell said.

The Midland plant was the site of Michigan's largest anti-nuclear demonstration last year when more than 5,000 protesters marched to its gates. Ten people carrying "Stop Nuclear Power" signs walked along a road outside the plant briefly Thursday.

"Consumers is only doing this (going ahead) to protect their investment," said one of the marchers, Pat Race of Bay City.

"What a mistake," Ron Wilson, energy director of the Lansing-based Public Interest Research Group in Michigan, said of the utility's decision.

Even if neighboring Dow Chemical Co. pulls out of its commitment to buy electricity and steam from the plant, "every indication is that we will proceed," Howell said.

"Don't forget we're building this for electricity too, and we need it. We had a long requirement to meet and we chose the way that looked like it would be the cheapest to the customer."

Still, he said, "We have not concluded that the plant cannot be completed by the end of 1984."

But, Howell cautioned, there are 250 areas where federal regulations are uncertain, and "if we have to do any one of those ... there's no way we're going to make it."

An earlier Consumers' estimate that the plant was 43 percent finished has been scaled back to 26 percent because of government regulations since the accident almost a year ago at Three Mile Island, Howell added.

Dow has a contract with Consumers that will cost the chemical giant \$180 million to break now.

# Utility asks \$1 billion to shut reactors

By ERIC SHARP  
The Record-Eagle, Traverse City, Mich.

LANSING — Consumers Power Co. wants to charge its customers more than \$1 billion over the next 20 years to shut down two nuclear power plants that cost \$212 million to build.

The proposal, which is before the Michigan Public Service Commission, has been attacked by the state Attorney General's Office and by consumer groups who argue that:

- The PSC has been asked to proceed without proper investigation. No one really knows how much it will cost to close a full-scale nuclear power plant, since it has never been done.
  - Consumers Power would be allowed to spend the money for construction and other projects as it is collected, with the intention that it borrow the money needed to shut down the Big Rock and Palisades nuclear power plants when it comes time to close them early in the next century.
- Big Rock is at Charlevoix, and Palisades is near South Haven.

THE CONSUMERS proposal also brings to light a controversy in the nuclear power industry. Companies building or seeking to build nuclear power plants estimate the costs to shut down plants at about 20 percent of the construction costs. But firms that need to raise money to decommission existing plants put the cost at 200 percent of the construction figure.

Joseph Tuchinsky, director of the Michigan Citizens Lobby, a consumer watchdog group, said that if the PSC approved the Consumers plan, it could mean that Michigan ratepayers would eventually be charged another \$10 million to close bigger

See NUCLEAR, Page 5A

DECOMMISSIONING is the process of deactivating a nuclear reactor and insuring that neither the working parts, the fuel nor the site presents any further threat to human health.

There are a number of ways of doing this, ranging from entirely dismantling the site and trucking them away for disposal to simply "mothballing" the site — fencing and guarding it for 30 or 40 years until the radioactivity cools down.

The latter process would be cheaper, since the cooled down materials would be less expensive to handle and dispose of than fuel and equipment hot from a newly deactivated reactor, but poses the greater security threat.

Other proposals include entombing the entire reactor site in concrete and guarding it for years until the radioactivity inside the tomb is no longer dangerous, or combinations of mothballing, dismantling and entombing.

All these proposals are based on a reactor's working life of 30 to 40 years. No one yet knows, however, whether a big, commercial reactor will last that long.

A Consumers spokesman said the company agreed with the PSC that it would cost \$526 million to dismantle the two reactors in the next century, and he added that using the decommissioning money for construction and other purposes as it came in would save ratepayers money.

He said the billion dollars was only a tiny fraction of the total revenues the company would raise in the 20-year period.

Coy said the Consumers plan, which has been approved by PSC staff members, "spread over 20 years would be the equivalent to another big rate increase for consumers every year in addition to the big rate increases the company already gets."

"And as the end of the life of the plant, they (power company owners) are not going to have the money there. It will have been spent and the company will have to try to go into the marketplace and raise it," Coy said. "Who knows what economic conditions are going to be like then? Remember, Consumers was unable to raise money in 1974-75, when we had got so tight right after the Arab oil embargo. So we're not talking about an impossibility."

A SPOKESMAN for Detroit Edison said the Fermi II plant near Monroe which is under construction will have cost an estimated \$1.3 billion to build when it goes into service in 1982. The 1976 construction cost estimate was \$983 million.

The spokesman said Edison believes decommissioning costs for that plant will be about \$110 million or nine percent of the construction cost, in 1982 dollars. When the plant reaches the end of its licensed life in 2012, he said, the cost of decommissioning will probably have inflated to \$520 million, or 40 percent of the initial construction cost. That figure still is considerably less than Consumers has suggested will be necessary to decommission its two existing plants. The \$133 million the company has said will be needed for the Big Rock plant is about five times that plant's construction cost.

The PSC has agreed to hold a hearing into the problems of decommissioning nuclear power plants, but it has not yet agreed, to the request by the Citizens Lobby or the Attorney General's Office that a decision on the Consumers Power case be held up until that hearing is complete.

Coy said no date has been set for the hearing.

Tuchinsky said granting the Consumers request before the hearing would be "dumb, just dumb, because how much meaning will there be in a ... hearing when the precedent has already been set."

JOSEPH BARDEN, supervisor of financial and accounting standards for the PSC, said the staff believes it would be cheaper for the public if the long run if Consumers were allowed to use the decommissioning money for construction projects rather than borrowing from a bank.

Asked whether the staff had tried to find a way to avoid paying the federal taxes, Barden said IRS rules in that area were ambiguous. He said the PSC staff had not contacted the IRS to learn whether there was any way around the tax problem.

Barden said he was uncomfortable with the power company's inability to give the PSC anything other than estimates of decommissioning costs, especially when power companies disagree among themselves and with consumer groups who have accused the companies of trying to hide the true costs of decommissioning nuclear plants.

Coy said he expected Consumers and Edison representatives to appear at the hearing on the decommissioning question, "and we'll let them sit down and argue this out among themselves, for a change."

"Consumers, which is facing the problem of decommissioning nuclear plants, says it will cost a lot. Edison, which wants to finish building a nuclear plant, says it will be cheap, don't worry about it," Coy said.

"There is a desperate need to develop some consistent policy in these decommissioning costs. This is an issue of enormous implications for the future of ratepayers," he said, "and I can't overemphasize when I say enormous."

THE NEW YORK TIMES, SUNDAY, MARCH 2, 1980

## Michigan Utility Battling Nuclear Agency on Safety

From the New York Times

CHARLEVILLE, Mich., March 1 — The Consumers Power Company, owner of the Big Rock Point nuclear power plant, has asked the Nuclear Regulatory Commission to approve the engagement of an outside consultant to study the plant and determine what equipment should be installed to provide the greatest improvements in safety at the most reasonable costs.

For some time officials of the utility company have hinted that the costs of meeting commission requirements might force the permanent shutdown of Big Rock, the world's fifth-oldest nuclear power plant and the first in this country licensed to use plutonium.

Especially pertinent to the Big Rock facility is the commission's requirement for a resupply and redesign of its containment building, because the 17-year-old plant's containment sphere is constructed of three-quarter-inch stainless steel through which gamma rays may pass.

Three Mile Island Alternatives Last year, as a result of the accident at the Three Mile Island nuclear power plant in Pennsylvania, the commission mandated a number of basic modifications and improvements for safety for all nuclear power plants operating or under construction in the nation.

According to one of the participating engineers who requested anonymity, the cost of most of the suggested alternatives would run above \$20 million.

Early this week the nuclear commission ordered the installation of a \$60,000 shutoff unit on the plant's recirculating pumps.

Citizens Called G-Isos Pigs Local citizens who have filed requests with the nuclear commission seeking the closing of Big Rock have said that its \$15,000 for leaving a valve that should have been closed open for more than a year.

The company's president, John D. Selby, has been making speeches around the state describing the nuclear commis-

as "dunk with power" and criticizing an nuclear groups.

In a recent discussion with local newspaper writers, Mr. Selby attributed the delays and rising costs of the company's multibillion-dollar Midland's nuclear facility to commission regulations and said that if he had to start all over again he would "go to coal." The plant is under construction.

Later last year the commission fined the company's Palisades nuclear plant \$15,000 for leaving a valve that should have been closed open for more than a year.

# Continuing Cloud Midwest Nuclear Plant, the Works 13 Years, Keeps Facing Delays

## Like Some Other Utilities, Consumers Power Blames Three Mile Island Effects

### \$1.3 Billion Down Drain

By JOHN R. BRIDGEMAN  
AND ROBERT L. SIMON  
Special to The Post-Record

Effects of the accident probably will continue to be felt by utilities across the nation, especially those involved in the 30 or so nuclear plants currently under construction. As new safety requirements force up their costs and lengthen construction periods, consumers, in turn, are likely to pay a price in higher costs of products from aspirin to automobiles.

With the Nuclear Regulatory Commission still devising a new set of rules governing nuclear plant construction, utilities building such plants are in a bind. And nowhere is the predicament more obvious than at Consumers Power Co., which supplies much of the power for the factories in Michigan that turn out cars, automobiles, computers and thousands of other products. General Motors Corp. alone pays the utility about \$10 million a year for electricity.

#### Previous Problems

Consumers Power may not be typical of the utilities set back by the Three Mile Island fiasco. For the Midland, the second nuclear plant near here, which has been in the works for 13 years, faced major problems even before the Pennsylvania accident.

But the extent of Consumers Power's problems became evident recently when the utility raised its cost estimate on the plant project to \$1.1 billion, nearly double the earlier estimate of \$1.07 billion, and delayed the expected completion three years, to the end of 1984. It blamed the increase largely on reviews and changes it expects to make to meet federal safety requirements flowing from the Three Mile Island accident.

The leap in costs for the Midland plant, it is estimated, could eventually mean a combined increase in Consumers Power electricity rates.

The problems of Consumers Power drew I. Jacques, Irvin C. Bupp, a Harvard business professor who has worked extensively on nuclear economics, predicts the nuclear safety furor will add an average of two years to the completion time of each nuclear-plant project. "The nuclear industry is in big trouble," he says.

#### Big Investment

One immediate problem for Consumers Power: whether to press ahead with its troubled plant. Company officials say the chances of abandoning the project are slim. But John Setby, chairman, says an abandonment isn't out of the question. "Right now our investment is \$1.3 billion," he says. "We have to decide whether we want to invest another \$1.8 billion to make that good." The company is expected to announce plans for the project this week.

Getting the additional money won't be easy. The company expects to have to borrow \$1.7 billion in the next five years instead of the \$1.4 billion projected before the plant cost estimate was raised. The financial markets may balk at lending that much more to the utility, and Consumers Power's credit rating may ultimately suffer.

Moreover, Consumers Power says, the costs of the Midland project will mean cutting back some other operations, with the risk of creating power shortages in the next few years. But without the Midland plant, the utility warns that more serious shortages may occur later.

"We are in a very serious situation," Mr. Setby says. And Consumers Power's major customers express similar alarm over the delay and the big increase in prospective costs for the Midland plant. The potential consequences are "horrendous," General Motors says. And Charles Drury, chairman of Hayes-Arden Corp., a big auto-industry supplier, says, "A blow like this could cause some hardships down the road."

#### Dow Chemical's Dilemma

For Dow Chemical Co., the hardships may not be far down the road. Dow, potentially the nuclear plant's main customer, has contracts to buy large amounts of electricity and steam for its vast Midland chemical-making complex.

But Dow is concerned that the power supply will be jeopardized by the delay until late 1984 in completing the Consumers Power's plant. Dow's dilemma is whether to wait and hope it doesn't run short, or to line up alternative generating sources and face paying Consumers Power about \$40 million for pulling out of its contracts.

Consumers Power and other utilities in similar straits blame the industry's problems largely on the Nuclear Regulatory Commission. The NRC, says Consumers' Mr. Setby, seems ready to "adopt any safety idea that anybody has thought of in the last 20 years."

Actually, except for some changes to deal with the most immediate problems raised by the accident, the NRC hasn't formally adopted anything. It has been trying to put together an "action" plan of new requirements. The latest draft contains some 150 items. They range from such relatively inexpensive ones as improved worker training, to potentially costly design changes aimed at better containment of radiation during major accidents.

The NRC argues that this is complex and time-consuming. But nuclear advocates, besides complaining about the cost of the

# Continuing Cloud: Nuclear Plant In Michigan Keeps Facing Delays

#### Continued From First Page

changes, contend that the NRC's failure to act quickly is itself causing problems.

Nuclera, Michigan Power Corp. for its stance, recently pushed back by two years the completion date of a nuclear plant it is building in upstate New York. The utility blames the uncertainty surrounding safety rules. "It doesn't make sense to put something in front of you if you might have to tear it out later," the company says.

While few doubt that Three Mile Island is affecting nuclear projects, some observers say utilities may use the regulatory uncertainties as an excuse to mask other problems. Many nuclear projects had already been set back by lack of money and slower-than-expected growth in demand for electricity, one observer notes, and "a utility may see this as a timely moment to announce a new delay and blame it all on Three Mile Island."

Roger Mathison, a senior NRC official who is leading the agency's effort to devise the action plan, criticizes the utility industry as "overreacting" to the safety reviews. He believes the charges being considered can be made with relatively little effect on projects if the effort is properly managed by the government and industry.

In any case, says Victor Gillsaky, one of the NRC's five commissioners, improved safety is the most important consideration. The costs may be painful, he says, "but it might be the price we have to pay for past neglect."

#### A "Best Guess"

Because the final safety rules aren't yet issued, Consumers Power says it has had to make decisions based on what it anticipates will be necessary. So the increased cost estimate, says Stephen H. Howell, senior vice president for project engineering and construction, "is our best guess."

The company is scrambling to revise and implement new building plans, an effort complicated by the large amount of work already done. Indeed, to a visitor, the plant looks nearly finished. The two reactors built by Babcock & Wilcox Co. (which, incidentally, supplied the reactor at Three Mile Island) have long been sitting in their 135-foot-high containment buildings.

But lots of work still needs to be done—and in some cases redone. New safety instruments will be installed. Miles of cable are being ripped out and rerouted, and another five million feet will be added. The utility expects to have to replace two multimillion-dollar computers with newer, more powerful models. Before Three Mile Island, the company estimated that 85% of the project's engineering work was done; that now has dropped to 59%.

Over half the \$1.4 billion in additional cost, though, doesn't come from new hardware but from the time needed to get it done, the utility says. It figures about \$375 million extra will be needed just to cover interest charges, insurance and taxes during the extended construction period.

#### Time Is Biggest Enemy

Indeed, time has probably always been the greatest enemy of the Midland project. When announced in 1967, the 1,361,000-kilowatt facility was supposed to cost about \$350 million and be completed by 1975. It was born in an era of little organized opposition to the rapid development of atomic energy. Safety questions now considered important were given little if any attention then.

Unfortunately for Consumers Power, the project has gone on long enough to encounter almost all of the major problems that have beset the nuclear industry. Environmentalists fought it; getting regulatory approval has taken increasing time and effort and for a while, the company even ran out of money to keep building.

In a vicious circle, each delay opened the project to the next controversy and further setbacks. For instance, part of the redesign going on at Midland is to meet new federal fire-protection criteria derived from a serious fire five years ago at an Alabama nuclear plant.

Though problems at Midland aren't new, the latest are big enough to shake even vet-

eran Consumers Power executives. When the new estimates came in, "I swallowed pretty hard," says Mr. Howell.

#### Is Dow Decisive?

Dow Chemical, with a big stake in the project, also swallowed hard, and then began considering other courses of action. If Dow would pull out of its Consumers Power contracts, some observers doubt the utility could easily complete and operate all of Midland.

Dow is already being pressured by its rivals. Its Midland complex currently gets power from two aging plants fired by fossil fuel, and the Environmental Protection Agency recently took the chemical company to court, charging more than 100 Midwest cities for alleged violations of clean air laws. Because of the delay in completing the Consumers Power nuclear plant, Dow now says it expects to spend \$6 million to keep its powerhouses running in the years ahead. But that effort will only give Dow some breathing room. If it doesn't get power from the new Consumers plant, it will still need to find other sources.

The Michigan Public Service Commission also faces tough decisions. The agency is being urged by opponents of the nuclear plant to disapprove of further financing, but it may not have that power even if it had the inclination. With so much already invested at Midland, PSC Chairman Daniel Denauw says, "There isn't any easy way out."

One customer unperturbed by the Consumers Power setback is Wolverine Electric Cooperative, which intends to stick with its plans to buy 100 kilowatts of the nuclear plant's power despite the increased price. "It's just like any other contract," says John Keen, general manager of the cooperative. "We'll pass it up to our customers."



#### French Glue Makers to Combine

PARIS—Pechiney Ugine Kuhlmann and France's state-owned coal authority, Charbonnages de France, said they intend to combine their operations for making glue and some chemicals.



# Continuing Cloud Lowest Nuclear Plant, He Works 13 Years, Cops Facing Delays

## Some Other Utilities, Consumers Power Blames Three Mile Island Effects \$3 Billion Down Draft

By JOHN R. KESHERILLER  
AND ROBERT L. SULLIVAN  
Special to THE STREET JOURNAL

Effects of the accident probably will continue to be felt by utilities across the nation, especially those involved in the 16 or so nuclear plants currently under construction, as new safety requirements force up their costs and lengthen construction periods. Consumers, in fact, are likely to pay a price in higher costs of products from asphalt to automobiles.

With the Nuclear Regulatory Commission still devising a new set of rules governing nuclear plant construction, utilities building such plants are in a bind. And nowhere is the pinch more obvious than at Consumers Power Co., which supplies most of the power for the factories in Michigan that turn out cars, corollaries, computers and thousands of other products. General Motors Corp. alone pays the utility about \$16 million a year for electricity.

Previous Problems  
Consumers Power may not be typical of the utilities set back by the Three Mile Island crisis. For one thing, its two-unit nuclear plant near here, which has been in the works for 13 years, faced major problems even before the Pennsylvania accident.

But the extent of Consumers Power's problems became evident recently when the utility raised its cost estimate on the plant project to \$1.1 billion, nearly double the earlier estimate of \$1.67 billion, and delayed the expected completion three years, to the end of 1984. It blamed the increase largely on reviews and changes it expects to make to meet federal safety requirements flowing from the Three Mile Island accident.

The leap in costs for the Midland plant, it is estimated, could eventually mean a one-third increase in Consumers Power electricity rates.

The problems of Consumers Power aren't unique. Irvin C. Bupp, a Harvard business professor who has worked extensively on nuclear economics, predicts the nuclear-safety furore will add an average of two years to the completion time of each nuclear-plant project. "The nuclear industry is in big trouble," he says.

Big Investment  
One immediate problem for Consumers Power: whether to press ahead with its troubled plant. Company officials say the chances of abandoning the project are slim. But John Selby, chairman, says an abandonment isn't out of the question. "Right now our investment is \$1.3 billion," he says. "We have to decide whether we want to invest another \$1.3 billion to make that go." The company is expected to announce plans for the project this week.

Getting the additional money won't be easy. The company expects to have to borrow \$1.7 billion in the next five years instead of the \$1.4 billion projected before the plant cost estimate was raised. The financial markets may balk at lending that much more to the utility, and Consumers Power's credit rating may ultimately suffer.

Moreover, Consumers Power says, the cost of the Midland project will mean cutting back some other operations, with the risk of creating power shortages in the next few years. But without the Midland plant, the utility warns that more serious shortages may occur later.

"We are in a very serious situation," Mr. Selby says. And Consumers Power's major customers express similar alarm over the delay and the big increase in prospective costs for the Midland plant. The potential consequences are "horrendous," General Motors says. And Charles Drury, chairman of Hayes-Albon Corp., a big auto-industry supplier, says, "A blow like this could cause some hardships down the road."

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Roger Mattson, a senior NRC official who is leading the agency's effort to devise the "action" plan, thinks the utility industry is "overreacting" to the safety reviews. He believes the changes being considered can be made with relatively little effort on projects if the effort is properly managed by the government and industry.

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## French Glue Makers to Combine

PARIS—Pechiney Ugine Kuhlmann and France's state-owned coal authority, Charbonnages de France, said they intend to combine their operations for making glue and some chemicals.