OUR VIEW

Limerick review of fuel storage requires caution

The lessons we learn from history are often as simple as the fact that there is much still to be learned.

On Sept. 20, 1971, James L. Everett, then-president of PECO, was quoted predicting that the Limerick power plant would reduce consumption of fossil fuels, a statement we now know to be inaccurate. He also made predictions about the problem now facing the Limerick plant of how to dispose of spent fuel rods.

"The relatively low volume of high-level wastes means that ultimately, disposing of them will not be an overwhelming problem," said Everett, of the spent fuel potential. "If we ever decide we don't want radioactive wastes on earth, we have a simple solution. We can load them in rockets and shoot them into the sun."

Now, some 35 years later, the suggestion is absurd. But when Everett made the statement, no one foresaw that disposing of nuclear waste would be a huge problem. It would have seemed that a workable, safe system would have been devised by now.

It hasn't been.

As the Limerick supervisors prepare to vote on an Exelon proposal for spent fuel rod storage, the thing to keep in mind is the uncertainty of the future.

Exelon is proposing to erect 24 steel and concrete canisters to hold the spent nuclear fuel that has been accumulating in storage pools inside the plant since it was constructed. Each canister can hold 61 bundles of fuel rods. Each bundle holds as many as 64 to 289 rods of uranium pellets, the stuff that will remain dangerously radioactive for 500,000 years.

Exelon, like other nuclear plants across the country, has been forced to construct "temporary" storage facilities because the plan to build a national depository for the fuel beneath Yucca Mountain in Nevada is decades behind schedule and is mired in scientific and political controversy.

Kevin Carrabine, Exelon's project manager, said last month that each year, the Limerick plant plans to fill four canisters. Although plans only call for 24 canisters, the approximately three-foot thick concrete pad on which the canisters will rest will be big enough to house about 90 canisters, said Carrabine.

The plan to build the pad for those canisters, as well as several outbuildings, was rejected earlier this month in a unanimous vote by the township's planning commission. However, they are a recommending body only and the final decision rests with the supervisors, who have scheduled a vote on the project for Thursday night's township meeting.

The supervisors also have some restrictions as to what they can approve or reject. The realm of approval applies only to the land development plan, not the issues of how best to house the rods.

For citizens who have questions about the project specifics, Exelon has planned an open house on Tuesday from 4 to 7 p.m. in the township building for discussion of the storage issues.

The supervisors are also starting their Thursday meeting early, at 6 p.m., to allow for public questions, and they have hired two consultants – one for the science and one for perception – to help them make and explain their decision.

What they need to keep in mind is how much the world has changed since Everett's comments in 1971 about shooting waste into the sun. Five years ago, no one would have thought people would deliberately fly planes into the venerable World Trade Center. They did, and their actions displayed places and things to be feared that we had never feared before.

We can not know what may hurt us in the future; we can not be certain what we have not yet seen that may become a threat. That's why plans for disposing of long-term radioactive waste must use the most protective position available, including offsetting the risks of terrorist attack.

To do otherwise is to betray the future.

Limerick supervisors must reject the plan as it now exists and send Exelon back to come up with something better. At the very least, the casks should be camouflaged in earth bunkers and spread out so as not to present a single target.

If protective measures are not followed now, it will be too late. The opportunity to get it right will be lost for the next 500,000 years.

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Court ruling could affect local nuke project

By Evan Brandt
ebrandt@pottsmerc.com

LIMERICK – A federal court decision regarding the possibility of a terrorist attack on radioactive fuel stored at a California nuclear power plant could have an impact on a similar proposal here.

When Exelon Nuclear announced plans to store spent nuclear fuel rods in casks on the grounds of its Limerick Nuclear Generating Station, the Alliance for a Clean Environment raised some concerns.

High on its list was the possibility of a terrorist attack.

Among its suggestions for dealing with those concerns was fortifying the casks in bunkers, or scattering the casks around the site so they would not present one single target.

Apparently they were not alone.

For when Pacific Gas and Electric Co. announced its plans to store spent nuclear fuel rods in casks on the grounds of its Diablo Canyon nuclear generating station, a similar California group raised the same concerns.

The difference is that the California Group, Mothers for Peace, went to federal court. And, joined by the California Attorney General, they won.

In a 3-0 decision earlier this month, the Ninth U.S. Circuit Court of Appeals in San Francisco set aside the permit granted Diablo Canyon by the Nuclear Regulatory Commission.

(See SPENT FUEL RODS on A3)

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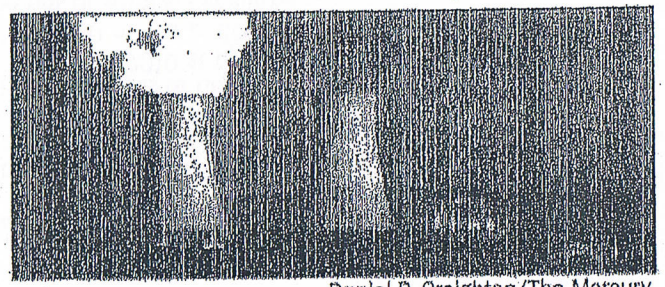
Running out of space

Loaded question of how to store radioactive fuel rods



Daniel P. Creighton/The Mercury

The Limerick Nuclear Generating Station will run out of space to store spent fuel by 2009, a year before Yucca Mountain could become the nation's spent nuclear fuel repository.

By John Gentzel
jgentzel@pottsmerc.com

One of the main problems with nuclear power generation is what to do with the highly radioactive and extremely dangerous spent fuel that will remain deadly for thousands of years after it is no longer in use.

Nuclear power plants were designed to hold roughly a decade's worth of spent fuel in large, steel-lined pools of water that allow the fuel assemblies — bundles of rods that contain uranium pellets, which are the keys to the reaction process — adequate time to cool.

But most of the nation's 103 nuclear power plants are running out of space in their pools. The Limerick Generating Station will have exhausted its current space by 2009, and many, including the Peach Bottom Atomic Power Station in York County, are already out of room.

The government previously made the determination that a single, long-term spent nuclear fuel repository was needed.

(See SPENT FUEL on A3)

The Mercury
A8 / Saturday, December 16, 2006

ANOTHER VIEW

The danger of storing nuclear waste

This summer, Limerick Township Supervisors voted to allow Exelon Nuclear to build an outdoor concrete pad so it could move radioactive waste from nearly-full indoor pools to outdoor casks at the Limerick plant. The vote was unanimous, overturning the Township Planning Commission. The mood of the supervisors was casual. Chairman David Kane said voting "no" wasn't an option believing a court would later reverse the decision.

The Democratic victory in November means Harry Reid is now the powerful Majority Leader of the U.S. Senate. Reid is from Nevada, the home of Yucca Mountain, designated to become a permanent repository for nuclear waste. Reid, a long time opponent of the Yucca project, declares it "dead right now," meaning nuclear plants like Limerick are stuck with nuclear waste indefinitely.

Guest columnist

Kane told The Mercury that storing waste at plants like Limerick is a "terrible solution." But he and the other supervisors were deluding themselves this summer if they assumed that Yucca would open any time soon.

Nuclear reactors that made atomic bombs began operating in 1943, and reactors that produce electricity started in 1957. But it wasn't until 1982, when Congress passed the Nuclear Waste Policy Act, that any effort was made to find a site for permanently housing the waste. Without the law, each plant just stored the waste it produced.

After the law was enacted, it took another 20 years for the U.S. Energy Department to examine several possible locations and choose Yucca as the designated site. But long before the November vote and Reid's ascension to power, the Yucca plan was in big trouble. The plan is mired in a variety of legal challenges, and even the most optimistic projection is that it won't be ready until 2018. But the surer bet is that it will never open.

About 77,000 tons of radioactive waste — nearly 1,000 of them at Limerick — is stored at dozens of U.S. nuclear plants. That staggering total equals hundreds of Chernobyls and thousands of Hiroshima bombs. The waste is actually a deadly combination of chemicals produced only when an atomic bomb explodes or a nuclear reactor operates. If these chemicals are ejected into the air, they enter the body and cause cancer, birth defects, and other radiation-related illnesses.

One such chemical is Strontium-90. In the 1960s, mothers protesting atomic bomb tests (ironically, close to the Yucca site) held signs such as "Please No More Strontium-90," an admission this was one of the more dangerous radioactive chemicals.

The treaty signed by President John F. Kennedy banned above-ground tests. Another chemical is Plutonium-239, which decays very slowly, and will not completely be gone for 240,000 years. So the plan to store waste must be 100 percent foolproof — meaning absolutely no chance that waste will ever escape — for this length of time, or disaster will ensue.

Yucca Mountain is a desolate area about 90 miles northwest of Las Vegas. The Energy Department concluded there was virtually no way to disturb the deadly chemical soup stored far underground. But water seeping through fissures into the site and frequent earthquakes make Yucca unsuitable for waste storage. Moreover, the potential of a terrorist attack makes any site unsuitable.

Opening Yucca would also require that waste would be shipped across the country by trucks, trains, and sometimes barges. Thousands of trips would be made, many through large population centers. The cargo on each trip would be the deadly stew of radioactivity, with 40 to 200 times the radioactivity of the Hiroshima bomb. Any successful terrorist attack or accident would be absolutely disastrous. The term applied to each shipment is "Mobile Chernobyl."

The federal Nuclear Regulatory Commission has approved, or rather rubber-stamped, all 36 applications from companies like Exelon to take the waste from the overloaded pools and move it to outside casks. Limerick Supervisor Renee Chesler commented that citizens can go to elected officials if they have concerns. But Chesler, like Kane, deliberately ignored the realities of nuclear politics.

Kane, Chesler, and the other Limerick supervisors are savvy enough to know that Yucca was going nowhere. They knew there was no solution to the waste problem 50 years ago when nuclear reactors began operating, and there is no solution now. They had the chance this summer to stop Exelon from adding more waste to the already huge amount, but chose to hide their heads in the sand. And with their blessing, Limerick has now been made into a dump for the most dangerous stuff on earth, for the foreseeable future and maybe forever, threatening us, our children, and future generations.

Joseph Mangano is national coordinator of the Radiation and Public Health Project, a research and education group based in New York.

The Mercury

A8 / Friday, December 22, 2006

READERS' VIEWS

Focus on deadly waste at Limerick

If Limerick Nuclear Power Plant has an accident involving its high level radioactive wastes or if it were breached through terrorist attack, the health, environment and economic consequences could be catastrophic. Our focus should be on addressing immediate and long-term threats from this deadly waste at Limerick, in the safest, most precautionary and most hardened on-site storage possible.

Exelon is likely to choose the cheapest options, not the safest, unless required by law to improve safety measures. Exelon's failure to supply back-up power for warning sirens and failure to protect against air strikes or missile attacks by terrorists shows their disregard for public health and safety.

NRC cannot be relied upon to do the right thing either. NRC decisions and policies protect the financial interests of the nuclear industry, not public health and safety. The only way that will change is if our federal officials require NRC to protect our interests.

There's no safe solution for storing Limerick's deadly waste. We don't believe Yucca Mountain will, or should, ever open. Centralized interim storage in Pennsylvania would increase transport risks to public health, safety, and security. Every time Limerick's deadly waste is moved our risk of a catastrophe increases. Comparing Limerick's fuel pools to above ground storage is a false argument. We can expect to always live with both.

However, there is something you can do to attempt to reduce our risk of a Limerick disaster.

Contact your U.S. Senators and Congressmen today. Ask them to support the "Principles for Safeguarding Nuclear Waste at Reactors," developed by national public interest groups.

If implemented, these principles would dramatically increase the safety of high-level radioactive wastes stored at Limerick Nuclear Power Plant and others.

DR. LEWIS CUTHBERT
ACE President

The Mercury

A4 / Wednesday, November 29, 2006

OUR VIEW

Permanent solution still lacking for nuke fuel rods storage

In many other industries, the difficult environmental questions center on how to safely dispose of raw materials used in a plant or process.

But when it comes to generating nuclear energy, disposal is out of the question. The highly radioactive byproducts of nuclear energy – the spent fuel rods – instead have to be "stored" indefinitely. This begs an entirely different set of questions and dangerous scenarios.

At Exelon Nuclear's Limerick Generating Station, the storage of spent fuel rods has demanded some attention and recent action, as the 20-year-old plant's accumulated spent fuel is exceeding the initial storage location. As a replacement, Limerick Township Board of Supervisors in July approved land development plans for the Exelon plant to install a concrete pad on which its own dry cask storage facility will be erected.

During meetings on those subjects, officials with Exelon and the Nuclear Regulatory Commission insisted the dry casks would only be needed for temporary storage and that the fuel would eventually be moved to Yucca Mountain, a federal disposal site proposed in Nevada.

However, with the November takeover of Congress by the Democrats, opponents of the federal government's planned spent nuclear fuel storage facility beneath Nevada's Yucca Mountain gained a powerful new ally. Harry Reid, the new Senate Majority Leader from Nevada, told reporters in his home state last week that the much-delayed, over-budget project is "dead right now."

Originally targeted for opening in 1998, the Energy Department now says the best case scenario for the opening of the Yucca Mountain facility is 2017.

It is intended to hold 77,000 tons of the radioactive spent fuel left over after it has been used to boil water in the nation's nuclear reactors. About 50,000 tons of that fuel is now stored in dry casks at 65 power plants, including Limerick's, in 31 states, according to the Associated Press. Reid said that keeping the fuel in dry cask storage at the nation's nuclear power plants will keep it safe for 100 years.

Others are not so sure.

Edward F. Sproat, director of the Energy Department's Office of Civilian Radioactive Waste Management, told The Associated Press that leaving the fuel stored at the plants is just "pushing the solution off to future generations." Limerick supervisors' Chairman David Kane called the idea of leaving the fuel at individual power plants "a terrible solution."

Beth Rapczynski, a spokeswoman for Exelon, said, "It's important to keep in mind that the federal government has an obligation under the law to build a central repository for used nuclear fuel, which was mandated by Congress in the Nuclear Waste Policy Act of 1983. "Since then, consumers of nuclear-generated electricity have paid more than $25 billion into the Nuclear Waste Fund for that purpose," Rapczynski said.

While everyone passes the buck on how to best store the spent fuel, the residents of the tri-county area surrounding the Limerick plant live each day with the material in our midst. The latest wrinkle that makes Yucca Mountain even more remote as a possibility underscores the importance of making "temporary" storage at Limerick as safe as it can be.

After all, it may not be temporary, and the area's future safety may be at stake.

Storage of spent nuclear fuel rods at Limerick plant could become permanent

(FUEL ROD STORAGE from A1)

dry cask storage facility will be erected.

During meetings on those subjects, officials with Exelon and the Nuclear Regulatory Commission insisted the dry casks are only needed for temporary storage and that the fuel will be moved to Yucca Mountain when it opens.

But Reid told reporters that not only would he refuse to allow any bill that helps the Yucca project to reach the Senate floor during his tenure over the next two years, but also that funding for the project may dry up quickly.

Reid also said that keeping the fuel in dry cask storage at the nation's nuclear power plants will keep it safe for 100 years.

That's not cutting it for Edward F. Sproat, director of the Energy Department's Office of Civilian Radioactive Waste Management. He told The Associated Press "leaving everything where it is, is not a solution to the problem."

Leaving the fuel stored at the plants is just "pushing the solution off to future generations," Sproat said.

But don't count Limerick supervisors' Chairman David Kane among those overly concerned by Reid's statements.

"I don't believe the decision is his to make," Kane said of Reid's pledge to oppose the Yucca Mountain project, adding he is "not surprised" that Reid has taken that position.

He called the idea of leaving the fuel at individual power plants, Limerick included, "a terrible solution" and added "I'm confident the federal government will continue to pursue the best possible solution."

Kane added that the township would continue to "be aware and monitor the situation."

Asked about Reid's comments, Beth Rapczynski, a spokeswoman for Exelon, said, "It's important to keep in mind that the federal government has an obligation under the law to build a central repository for used nuclear fuel, which was mandated by Congress in the Nuclear Waste Policy Act of 1983.

"Since then, consumers of nuclear-generated electricity have paid more than $25 billion into the Nuclear Waste Fund for that purpose," Rapczynski said.

"While we believe dry cask storage is a safe interim solution, we continue to fully support Yucca Mountain as the long-term storage solution for used nuclear fuel," she said.

Donna Cuthbert, vice president of the Alliance for a Clean Environment, does not support Yucca Mountain and lauded Reid's stand in the issue.

"The more I've studied this issue, the more I've come to realize the removal and transport of this deadly waste is as much or more of a threat than keeping it where it is now," Cuthbert said. "I commend Sen. Reid for taking a thoughtful approach to this."

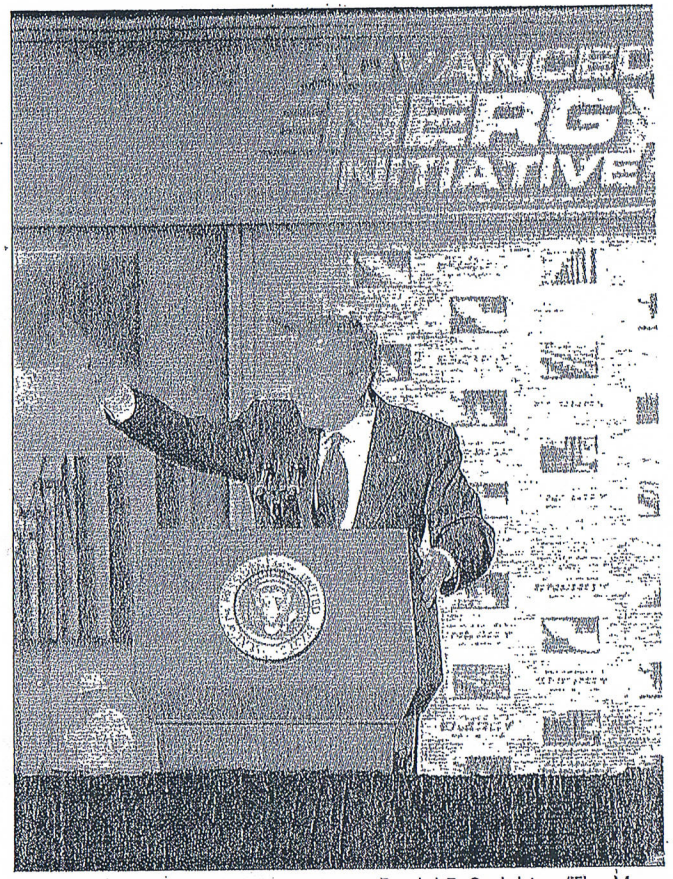
"Yucca is a scientifically unsafe place to put this fuel and while it's unfortunate that we have a place with this stuff in our back yard, I think everyone has to come to the realization that it's not going anywhere," Cuthbert said.

"I think we need to make that project at Limerick safer, which is why I'm so concerned about Exelon refusing Pottstown's request for additional monitoring, and I think we need to stop making more of this waste," said Cuthbert.

She was referring to the push by President Bush to build new nuclear plants, an initiative he reiterated when he visited the Limerick plant in May.

The NRC has already begun to plan for more applications by adding funds to its budget to review those applications.

"There is more than enough wind and solar power available to make all the electricity we need and we can stop making this horrible waste that will be a threat for thousands of years," said Cuthbert.



Daniel P. Creighton/The Mercu

President Bush speaks at the Exelon Nuclear Limeri Generating Station in May. The "temporary" storage of high radioactive spent nuclear fuel rods at Exelon Nuclear's Limeri Generating Station could become permanent, at least as far the new Democratic leader of the U.S. Senate is concerned.

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Environmental council to push Exelon on nuclear plant security

By Evan Brandt
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POTTSTOWN — Speaking on the fifth anniversary of the Sept. 11 terrorist attacks, a borough official pledged Monday to press Exelon Nuclear more closely about how it plans to prepare the defense of its latest project at the Limerick plant against an attack by terrorists.

On Monday night, Pottstown Borough Council adopted the recommendations of its Environmental Advisory Commission, which ask Exelon Nuclear to install additional radiation and temperature monitoring when it erects its dry cask storage system for its radioactive spent fuel rods.

The project, approved by Limerick Township in July, will allow the excess fuel rods now stored inside the generator building into steel and concrete casks located on a concrete pad outside the generator building but within Exelon's defended perimeter.

Don Read, who is the chairman of the EAC, told council this is just the first of a series of recommendations the group expects to make to Exelon.

Noting that Exelon had asked in March to meet with the EAC and asked for input on its controversial project, Read described the recommendation for additional monitoring as a trial balloon.

"We picked an easy issue to see how productive these discussions would actually be," Read told Borough Council Monday.

"We have other, more complicated issues we would like to address," said Read.

"And I suppose it's ironic that we're standing here on the fifth anniversary of the terrorist attacks and I'm telling you we're going to ask Exelon whether the possibility of a terrorist attack has been considered in their plans," Read said.

Elizabeth Rapczynski, director of communications for the plant, said after the meeting the spent fuel will be stored "within a secure area and the casks are designed and constructed with all man-made and natural threats in mind."

"I realize that attacks like those on Sept. 11 are hard to defend against, but

(See NUCLEAR PLANT SECURITY on A7)

Pottstown wants more monitoring at nuclear plant

By Evan Brandt
ebrandt@pottsmerc.com

POTTSTOWN – The borough's environmental advisory council is taking another run at Exelon, trying to get the company to install additional monitoring at the dry cask spent fuel storage facility it will soon erect at the Limerick nuclear plant.

According to a draft of a letter to plant manager Christopher Mudrick, Pottstown intends to ask that constant, real-time temperature monitoring be conducted at the cask site.

On Nov. 16, Mudrick rebuffed a September request by Pottstown that additional, real-time radiation monitors be placed around the dry casks to provide extra protection in the event of a release of radiation.

Mudrick wrote that the radiation monitors are "in place" and checked routinely by plant personnel, but the information on the monitors would not be routed to a "central control center" as Pottstown had requested.

Now the borough is making the same request, but this time for temperature monitoring.

During presentations Exelon made on its dry cask plans, "emphasis was placed on the fact that the casks are kept sufficiently cool by the passive air flow through the facilities housing the casks," the letter reads.

"The presentation also indicated that the warming of the temperatures outside the cask could be an indication of problems within the cask," the letter continues. "Since a fluctuation in the external temperatures could be an indication of two possible issues, we do not understand why constant monitoring of the temperature would not be deemed to be just as important as constant monitoring for radiation."

Added the letter, "we believe that the cost of such a system would be relatively modest."

Elizabeth Rapczynski, a spokeswoman for Exelon, said she could not comment on a letter the company has not yet officially received.

Pottstown Borough Council voted unanimously Jan. 8 to send the letter once it has been reviewed by Borough Solicitor Charles D. Garner Jr. and Borough Manager Ray Lopez.

The dry cask storage casks are being erected at the Limerick plant because the spent fuel pool located inside the reactor building is reaching its capacity.

The casks are officially considered a temporary solution until the nation's spent fuel repository beneath Nevada's Yucca Mountain is co pleted.

However, one by-product of the Democra take-over of Congress in November was installation of Yucca Mountain opponent, S Harry Reid of Nevada, as the new Sen Majority Leader.

That, and the fact the project is embroiled financial and scientific controversy, has many to note that the dry casks should be c sidered as permanent installations since t may well reflect the reality of the situation.

That is a view strongly disputed by the nucl industry, which points out that the federal g ernment has a legal and contractual obligatio take possession of the spent fuel – wh remains radioactive for centuries – as well responsibility for its permanent storage.

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NRC: Dry casks not part of new 9/11 safeguards

By Evan Brandt
ebrandt@pottsmerc.com

LIMERICK — When it comes to building new nuclear power plants, the nuclear industry has asked that it be required to design plants that can withstand a 9/11-type attack by a hijacked jet.

When it comes to dry cask storage facilities however, the industry, the federal government and even one of the nuclear industry's harshest critics do not have the same concerns.

One such dry cask storage facility is planned for Exelon Nuclear's Limerick Generating Station.

On Dec. 8, the Nuclear Energy Institute sent a widely referenced letter to Dale E. Klein, chairman of the U.S. Nuclear Regulatory Commission.

The letter, as reported in The New York Times and the Associated Press, asks the NRC to be sure to require designs for new nuclear plants to be adequate to protect against "conditions that result from large fires and explosions that challenge core cooling, containment, or spent fuel pool integrity."

In a Dec. 25 Associated Press report, Nuclear

(See SAFEGUARDS on A3)

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Maker of fuel rod storage casks cited

NRC officials say manufacturer didn't measure thickness

By Evan Brandt
ebrandt@pottsmerc.com

LIMERICK – The maker of the casks that will hold spent fuel from the Limerick Nuclear Generating Station was cited last month for violating a manufacturing procedure.

During June inspections at two manufacturing locations in Japan, Kobe Steel Ltd. and Hitachi Zosen Mechanical Corp., inspectors for the Nuclear Regulatory Agency found a violation – the failure to adequately measure the thickness of casks being manufactured there.

The casks in question are not those destined for Limerick, said NRC spokesman Neil Sheehan. "They haven't even started working on the Limerick casks yet," he said.

The two Japanese manufacturers have been contracted by Columbia, Md.-based Transnuclear Inc., a subsidiary of the French company Areva, to build the casks. Transnuclear holds the license from the NRC for its NUHOMS cask system, which is the one that will be used at Limerick.

Sheehan said the violation is a "level four violation," the lowest issued by the NRC. There are no fines involved as of yet.

In a July 10 letter to Transnuclear President and CEO Tara Neider, NRC official Robert J. Lewis wrote that the company must respond to the violation and the response would be used "to determine whether further enforcement action is necessary."

Neider said Friday the violation notice "had no impact on product quality."

She said other than the paperwork issue for which the violation was received, "the NRC lead auditor said

(See STORAGE CASKS on A3)

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Court ruling could affect local nuke project

By Evan Brandt
ebrandt@pottsmerc.com

LIMERICK – A federal court decision regarding the possibility of a terrorist attack on radioactive fuel stored at a California nuclear power plant could have an impact on a similar proposal here.

When Exelon Nuclear announced plans to store spent nuclear fuel rods in casks on the grounds of its Limerick Nuclear Generating Station, the Alliance for a Clean Environment raised some concerns.

High on its list was the possibility of a terrorist attack.

Among its suggestions for dealing with those concerns was fortifying the casks in bunkers, or scattering the casks around the site so they would not present one single target.

Apparently they were not alone.

For when Pacific Gas and Electric Co. announced its plans to store spent nuclear fuel rods in casks on the grounds of its Diablo Canyon nuclear generating station, a similar California group raised the same concerns.

The difference is that the California Group, Mothers for Peace, went to federal court. And, joined by the California Attorney General, they won.

In a 3-0 decision earlier this month, the Ninth U.S. Circuit Court of Appeals in San Francisco set aside the permit granted Diablo Canyon by the Nuclear Regulatory Commission.

(See SPENT FUEL RODS on A3)

The Mercury

A8 / Saturday, July 29, 2006

READERS' VIEWS

Nuclear waste poses a danger

Limerick Nuclear Power Plant's high-level radioactive waste storage threatens the safety of every person reading this newspaper. As long as Limerick continues to operate, high-level radioactive waste (that can remain radioactive for hundreds of thousands of years) will keep piling up in our backyard. It will outlive any container storing it. Most of this deadly waste will remain here forever, leaving future generations with a lethal legacy.

Limerick's fuel pools already hold enough high level radioactive waste to create a disaster worse than Hiroshima. Above-ground cask storage is not instead of fuel pools at Limerick, it is in addition.

Fuel rods are far more radioactive after use. To call it "spent fuel" is deceptive. The only thing "spent" is our money as ratepayers and taxpayers, and our patience as concerned citizens subjected to this deadly threat by the nuclear industry and their regulators. Ten years after removal from the reactor, the radiation dose one meter away exceeds 10,000 REMS per hour. A dose of 5,000 REMS would be expected to cause immediate incapacitation and death within one week.

Still, the Nuclear Regulatory Commission failed to address concerns of a nuclear engineer about specific design flaws. The NRC appears more interested in protecting Exelon's interests than public health and safety. The NRC's lax oversight and enforcement of violations is alarming. There has been a dismal record of cask accidents and incidents in the brief 20 years casks were in use.

Deadly radioactive waste stored above ground creates another, possibly more inviting terrorist target at Limerick Nuclear Plant in the middle of this heavily populated region. Still the NRC refuses to address or improve security against missiles or air strikes even though army testing proved these casks can be penetrated with missiles. There's an airport within one mile of Limerick Nuclear Plant and another within five miles. Mothers For Peace won against the NRC in a California court concerning the NRC's failure to address terrorism and casks. We need and deserve the same scrutiny.

Unless required, Exelon won't improve security against missile and air strikes or upgrade the cask design. Unfortunately, the NRC is serving their corporate master and acting as a salesman rather than a regulator.

The NRC convinced the Limerick supervisors that they had no power to deceive the public about threats to health and safety. Sadly, permitting is splintered to such a degree that supervisors approved a cement slab to hold the most lethal waste known to mankind, without even knowing the thickness or how the fault line could impact it. Limerick supervisors are mandated by law to protect the health, safety, and welfare of local citizens. I believe they failed to do that when they treated Exelon's proposal like any other land use issue and ignored the fact that large amounts of high-level radioactive waste were being placed above ground, perhaps permanently.

Clearly, there won't be improved cask design or security without public involvement. Please take action today:

1. Contact Senators Specter and Santorum, and Congressmen Gerlach and Dent.
2. Ask for a comprehensive Environmental Impact Statement (EIS) for Limerick Nuclear Power Plant to include terrorism using current population and financial data.
3. Ask for a public hearing for all in the region, prior to Limerick's use of casks.
4. Contact Limerick supervisors and urge them to defer or reject any land use permits, at least until an EIS is completed and a public hearing is held.

DONNA CUTHBERT
Pottstown

OUR VIEW

Limerick review of fuel storage requires caution

The lessons we learn from history are often as simple as the fact that there is much still to be learned.

On Sept. 20, 1971, James L. Everett, then-president of PECO, was quoted predicting that the Limerick power plant would reduce consumption of fossil fuels, a statement we now know to be inaccurate. He also made predictions about the problem now facing the Limerick plant of how to dispose of spent fuel rods.

"The relatively low volume of high-level wastes means that ultimately, disposing of them will not be an overwhelming problem," said Everett, of the spent fuel potential. "If we ever decide we don't want radioactive wastes on earth, we have a simple solution. We can load them in rockets and shoot them into the sun."

Now, some 35 years later, the suggestion is absurd. But when Everett made the statement, no one foresaw that disposing of nuclear waste would be a huge problem. It would have seemed that a workable, safe system would have been devised by now.

It hasn't been.

As the Limerick supervisors prepare to vote on an Exelon proposal for spent fuel rod storage, the thing to keep in mind is the uncertainty of the future.

Exelon is proposing to erect 24 steel and concrete canisters to hold the spent nuclear fuel that has been accumulating in storage pools inside the plant since it was constructed. Each canister can hold 61 bundles of fuel rods. Each bundle holds as many as 64 to 289 rods of uranium pellets, the stuff that will remain dangerously radioactive for 500,000 years.

Exelon, like other nuclear plants across the country, has been forced to construct "temporary" storage facilities because the plan to build a national depository for the fuel beneath Yucca Mountain in Nevada is decades behind schedule and is mired in scientific and political controversy.

Kevin Carrabine, Exelon's project manager, said last month that each year, the Limerick plant plans to fill four canisters. Although plans only call for 24 canisters, the approximately three-foot thick concrete pad on which the canisters will rest will be big enough to house about 90 canisters, said Carrabine.

The plan to build the pad for those canisters, as well as several outbuildings, was rejected earlier this month in a unanimous vote by the township's planning commission. However, they are a recommending body only and the final decision rests with the supervisors, who have scheduled a vote on the project for Thursday night's township meeting.

The supervisors also have some restrictions as to what they can approve or reject. The realm of approval applies only to the land development plan, not the issues of how best to house the rods.

For citizens who have questions about the project specifics, Exelon has planned an open house on Tuesday from 4 to 7 p.m. in the township building for discussion of the storage issues.

The supervisors are also starting their Thursday meeting early, at 6 p.m., to allow for public questions, and they have hired two consultants – one for the science and one for perception – to help them make and explain their decision.

What they need to keep in mind is how much the world has changed since Everett's comments in 1971 about shooting waste into the sun. Five years ago, no one would have thought people would deliberately fly planes into the venerable World Trade Center. They did, and their actions displayed places and things to be feared that we had never feared before.

We can not know what may hurt us in the future; we can not be certain what we have not yet seen that may become a threat. That's why plans for disposing of long-term radioactive waste must use the most protective position available, including offsetting the risks of terrorist attack.

To do otherwise is to betray the future.

Limerick supervisors must reject the plan as it now exists and send Exelon back to come up with something better. At the very least, the casks should be camouflaged in earth bunkers and spread out so as not to present a single target.

If protective measures are not followed now, it will be too late. The opportunity to get it right will be lost for the next 500,000 years.

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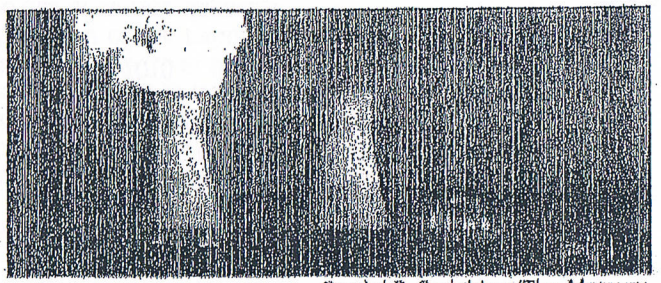
Running out of space

Loaded question of how to store radioactive fuel rods



Daniel P. Creighton/The Mercury

The Limerick Nuclear Generating Station will run out of space to store spent fuel by 2009, a year before Yucca Mountain could become the nation's spent nuclear fuel repository.

By John Gentzel
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One of the main problems with nuclear power generation is what to do with the highly radioactive and extremely dangerous spent fuel that will remain deadly for thousands of years after it is no longer in use.

Nuclear power plants were designed to hold roughly a decade's worth of spent fuel in large, steel-lined pools of water that allow the fuel assemblies — bundles of rods that contain uranium pellets, which are the keys to the reaction process — adequate time to cool.

But most of the nation's 103 nuclear power plants are running out of space in their pools. The Limerick Generating Station will have exhausted its current space by 2009, and many, including the Peach Bottom Atomic Power Station in York County, are already out of room.

The government previously made the determination that a single, long-term spent nuclear fuel repository was needed.

(See SPENT FUEL on A3)

RADIOACTIVE WASTE TRANSPORTATION CALLED A "MOBILE CHERNOBYL"

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