11/14/11

Limerick nuke plant cited for safety issues

Result may be more NRC oversight

By Evan Brandtebrandt@pottsmerc.com

LIMERICK — The month-long failure of two safety components involved with the cooling and containment of a nuclear reactor core at Exelon Nuclear's Limerick Generating Station was an "apparent violation" of Nuclear Regulatory Commission rules, according to an inspection report issued earlier this month.

The NRC issued a preliminary "white finding" in connection with the problem.

Two other less serious "green findings" indicated the cause of two reactor "scrams" or unscheduled shut-downs, this spring.

All three issues were the result of inadequate guidance or instructions on the part of Exelon personnel, which is based on inspections that were completed Sept. 30, according to the report.

April Schilpp, senior manager of Mid-Atlantic Nuclear Communications, said Wednesday that the company had not yet decided whether to request a hearing on the findings.

NRC spokesman Neil Sheehan wrote that if the more serious finding "is finalized, the plant will re-

(See LIMERICK on A3)

Flaw found in mechanism to shut down nuclear plant

Warning tied to renewed focus on earthquake risk

By Evan Brandt

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LIMERICK — Even before an earthquake and tsunami re-focused the world's attention on the dangers inherent in nuclear power, the manufacturer of a key safety mechanism at many nuclear power plants — including Limerick Generating Station — was warning it might not work during an earthquake.

GE Hitachi first issued the warning to the Nuclear Regulatory Commission in September, 2010 and confirmed the concern again last month.

The concern refers to the "control rods" for boiling water reactor models, a type of reactor used at Exelon Nuclear's plant here along the Schuylkill River.

The control rods are inserted into the reactor between the rods of nuclear fuel in order to shut it down quickly a procedure

GE calls for shut-down tests on reactors worldwide

Fri, Sep 30 2011 By Jim Brumm

- * GE says problem could occur under limited conditions
- * NRC says problem not an "immediate" safety issue
- * Boiling-water design similar to GE reactors at Fukushima

WILMINGTON, NC Sept 30 (Reuters) - GE Hitachi Nuclear Energy has warned operators of boiling water reactors (BWR) worldwide -- including 35 in the U.S. -- that the plants could fail to shut automatically during an earthquake, potentially risking the safety of the power plant.

In an event notification posted by the Nuclear Regulatory Commission this week, GE Hitachi told nuclear operators to conduct tests to determine what conditions would prevent the reactors from shutting safely during an earth quake.

GE Hitachi Nuclear Energy is a venture between General Electric Co (GE.N: Quote, Profile, Research, Stock Buzz) and Hitachi Limited (6501.T: Quote, Profile, Research, Stock Buzz).

GE Hitachi spokesman Michael Tetuan said most nuclear plants could fix the problem by replacing fuel channels, if needed. A typical boiling water reactor has between 400 and 800 such channels.

The affected plants are of the same GE design as Japan's Fukushima reactors which were crippled by an earthquake and tsunami in March.

GE said the probability of a reactor not shutting properly is very low. Because of the limited circumstances under which a unit might not shut automatically, NRC spokesman Scott Burnell said the issue "is not an immediate safety issue."

He said GE's notice is information the agency wants nuclear vendors to raise so that companies can respond.

Affected by the potential glitch are type 2-5 BWRs designed by General Electric and built between the late 1960s and the early 1990s.



Sunday, June 5, 2011 • Pottstown PA / \$1.75



A recent NRC inspection at Exelon Nuclear's Limerick Generating Station raised some new issues. Mercury file photo

government inspection has found.

VRC inspection raises new Issues at Limerick plant

Post-Japan checkup focuses on 'extraordinary events'

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However, an NRC spokesman confire and flood mitigation capabilities," "could adversely impact the plant's firmed some of the elements called plant was struck with an earthquake, a into question by the site inspectors quake and tsunami. The inspections were meant to look

at issues arising from extraordinary even if the emergency were within the events, similar to those that occurred bounds of a disaster the plant was deat Japan's Fukushima Daiichi plant signed to withstand.

least as bad as the Chernobyl accident handle extreme emergencies like The NRC has taken an increased interest in how nuclear plants would those in Japan, now considered at as the result of the March 11 earth-

(See NUCLEAR PLANT on A4)

Nuke plant reports 3rd shutdown this week

By Evan Brandt, ebrant@pottsmerc.com

LIMERICK - Less than a day after putting one of its two nuclear reactors back on line following two unplanned shutdowns, the other nuclear reactor at Exelon's Limerick Nuclear Generating Station shut down unexpectedly Friday, according to the Nuclear Regulatory Commission.

"Limerick Unit 1 experienced an automatic scram at about 10:15 a.m. today. There were no complications during the shutdown, safety systems responded as expected, and the cooldown of the reactor is proceeding safely," according to an e-mail from NRC spokesman Neil Sheehan.

"The cause of the scram is being investigated by Exelon," Sheehan wrote. "Plant operators were performing a test involving the turbine at the time, but it is unclear at this point if

(See LIMERICK on A5)

COMING SUNDAY:

Post-Japan checkup raises new issues

Nuke plant reports 3rd shutdown this week

(LIMERICK from A1)

that triggered the shutdown."

It was 5:02 a.m. Sunday that the plant's other reactor, Unit 2, shut down for the first time.

One day later, while completing testing on the system that controls the opening and closing of turbine valves, the turbine tripped offline again, at 11:50 a.m. Monday.

In February, the same reactor, Unit 2, shut down unexpectedly due to problems with systems related to recirculating pumps. That shutdown lasted for more than two days.

Unit 2 went back on line Thursday.

Sheehan wrote Friday morning, "our Senior Resident Inspector went to the plant's control room immedidependently whether plant operators are plant from 5 to 7 p.m.

following the appropriate steps and procedures. He will continue to gather information on what occurred and the company's response to it."

Limerick Unit 1 was at 100-percent power when it shut down.

The NRC tracks scrams based on the number of times they happen per 7,000 hours of on-line operation.

"The shutdown would count as a hit on Limerick Unit 1's Performance Indicator for Unplanned Scrams per 7,000 Hours of Online Operation. As of the end of the first quarter of 2011, that indicator stood at 0.8," Sheehan wrote.

"Again, a plant has to have more than three unplanned scrams during that 7,000hour period to receive increased NRC oversight," Sheehan wrote.

A public community inforately after the scram and is in- mation session is planned verifying Wednesday at the power

NRC approves power increase at Limerick plant

crease by 1.65 percent as the result of a LIMERICK – The capacity of the two nuclear reactors at Exelon Nuclear's Limerick Generating Station will soon indecision by the federal government. By Mercury Staff

Commission announced it had approved On Monday, the Nuclear Regulatory

clear generator from 1,189 megawatts to generating capacity.

Called an "uprate," the change will increase the generating capacity of each nu-1,205 megawatts, according to an NRC

Exelon intends to implement Unit 1's increase within 90 days? For Unit 2, the

after the completion of its 2011 spring re-

fueling outage

tion focused on the nuclear steam supply measurement of the flow of feedwater. tection, operations and training, testing. level," the NRC wrote in its release. In making the decision the NRC evaluasystems, instrumentation and control sys-

Exclon's request to increase the plant's increase will be implemented 90 days and technical specification changes.

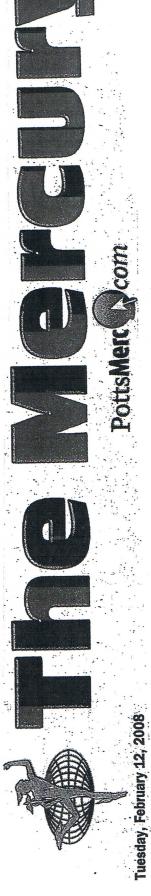
due to the availability of more accurate According to the release, the NRC decided the increase could be done safely

"NRC staff reviewed the company's tems, electrical systems, accident evalua- analysis showing the plant's design can tions, radiological consequences, fire pro-accommodate the increased power

LIMERICK NUCLEAR PLANTS

POWER INCREASES - CALLED "UPRATES" WILL INCREASE HARMS AND THREATS

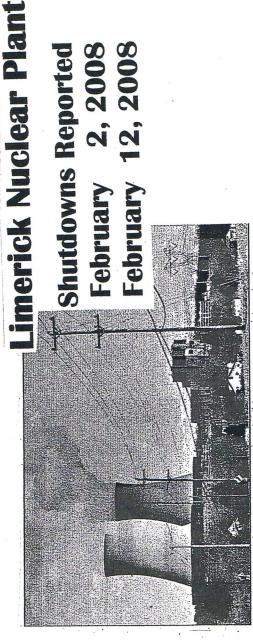
EVEN LARGER INCREASES AT LIMERICK GREEDY EXELON IS REQUESTING



Pottstown, Pennsylvania

second in 10 days **Nuclear reactor** shutdown is

By Evan Brandt



12, 2008

2, 2008

A generator at the Limerick Nuclear Generating Station was shut down on Saturday for the third time since Feb. 1.

By Evan Brandt

3rd Unplanned Shutdown In 2 Months imerick generator shut down again 25, 2008

Reported March

Repeated Problems In 2008 Support NO Relicensing In 2029

WORLD NATION/

Workers auestion con Some

Associated Press Writer By H. Josef Hebert

WASHINGTON - A third of the Commission question the agency's commitment to public safety and nearworkers at the Nuclear Regulatory ly half believe it's not "safe to speak up" about their concerns, an internal survey concludes,

ture and climate" has improved since a The report by a private consulting Irm said the NRC's overall "safety culsimilar 1998 survey and that the agency and its workers are committed protecting public safety at the nation's nuclear power plants.

But the survey - which covered about half of the agency's 3,072 employees, from clerical workers to nuclear engineers and senior managers - found many employees feeling less

the employees do not feel that it is "safe The survey found that nearly half of

getting our message across" about safeto speak up in the NRC" about con-And a majority of the workers comcerns about safety and other issues,

ty commitment. But overall, Meserve said, "the report reflects an enormous amount of progress" from a similar survey in

plained the agency "has not established a climate where traditional ways of

doing things can be challenged,"

In almost every category covered by the survey — from attitudes about senior managers and training to the future direction of the agency - the results were more positive this time than four years ago, agreed NRC Assistant Inspector General Stephen Jingbaum, whose office ordered the When asked a series of questions assessing agency attitudes toward safety and employee involvement in how

the agency addresses safety issues, 67 percent responded favorably and 33

Senior and midlevel career employ-

percent unfavorably.

ees and non-supervisory workers most

David Lochbaum, a nuclear engineer and industry watchdog for the Union of Concerned Scientists, said he was struck by "the gulf between mantion of the NRC's safety commitment agement and the work force" percepand that no improvement had been made in that area over the past four nearly 90 percent of the top-level manfrequently raised questions about the agency's safety commitment, while agers saw no problem, according to the NRC Chairman Richard Meserve in survey conducted throughout the NRC

an interview acknowledged the survey demonstrates "there are some issues we still need to work on" and said senior managers must work harder "in

in May and June of last year.

"If these numbers were reported to

the NRC by a (nuclear power) plant owner; saying half of its work force did-n't feel comfortable raising safety issues, the NRC would require the owner to fix it because the number is not acceptable," said Lochbaum,

 A significant number of workers expressed concern about the nuclear industry influencing regulations. Other findings of the survey:

sense of rededication" to their job and The terrorists attacks of Sept. 11, 2001 have given the NRC workers mission as a safety regulator.

nuclear facilities are outdated and "leave the security of the nuclear sites Some NRC employees worry that for requirements ... vulnerable to sabotage. training safety

ers lack confidence in decisions made by the NRC's senior management team. That's an improvement over the force expressed a lack of confidence in Just under 40 percent of the work-998 survey, when half of the work

their senior bosses,

of the workers feel the NRC is highly The study also said only 43 percent regarded by the public.

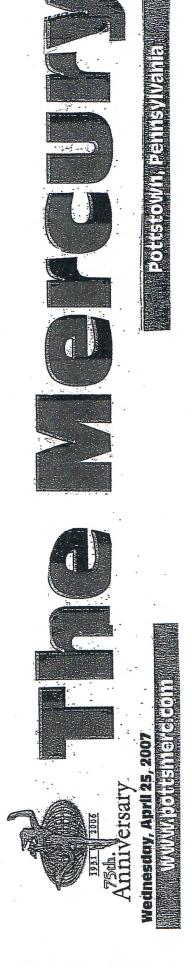
three in four - or 76 percent - responded that it was, a decline of 5 employees "believe NRC's commit-When asked the question of whether ment to public safety is apparent in what we do on a day-to-day basis, percentage points from 1998,

The same company conducted the The "2001 Survey of NRC's Safety Culture and Climate" was conducted Survey Research by International Survey Research LLC, a private firm hired by the NRC 1998 survey

The findings were based random to 2,868 of the NRC's 3,072 employees, with 53 percent of them respondsufficient" sample to draw agency-wide interviews and written questions sent ng. The report said that's a "more than conclusions

Low Coolant Level Can Lead To Disaster

April 2007 - Low Coolant Caused Limerick Shut Down

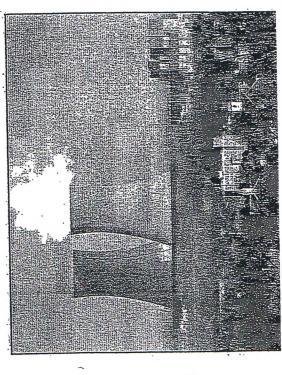


April 24, 2007

Coolant Level Causes Power Plant Generation To Shut Down

Low Coolant Level Was Detected In Unit 2

15 days later - NO explanation The incident was still under investigation April 9, 2007 - 5 days after refueling there was a problem with a seal on the pump.



NUCLEAR REALITY CAMPAIGN * PUBLIC CITIZEN * RADIATION AND PUBLIC HEALTH PROJECT * ALLIANCE FOR A CLEAN ENVIRONMENT

NEWS RELEASE

For Immediate Release: October 26, 2004

Contact: Geoff Ower, Nuclear Reality Campaign, 215-743-3767 Brendan Hoffman, Public Citizen, 202-285-1391 Joseph Mangano, Radiation and Public Health Project, 484-948-7965 Donna Cuthbert, Alliance for a Clean Environment, 610-326-2387

Public Interest Groups Urge Exelon to Address Nuclear Plant Security Problems, Avoid Quest for Longer Operating Licenses

PHILADELPHIA – Using the aging Limerick nuclear power plant as a case study as to why nuclear energy is a failing proposition in the U.S., four consumer groups today urged Exelon, the nation's largest nuclear operator, to recognize the dangers of nuclear power by choosing not to renew the operating license of its plant located just 20 miles outside Philadelphia. The groups rallied in front of Exelon-owned PECO headquarters in downtown Philadelphia to urge energy companies such as Exelon to address security risks at the Limerick and other reactors, and to create a new energy plan for future generations that will not create environmental and health risks to consumers.

Exelon owns and operates the Limerick plant in Limerick Township. The Limerick Unit 1 reactor's operating license expires 20 years from today, which means Exelon is now eligible to apply for a 20-year extension. Exelon has not said it intends to renew the Limerick license specifically, but has said it expects to renew most if not all its licenses eventually. It has received or is seeking extensions at four of its ten plants currently. Of 103 operating reactors in the U.S., 26 have received such extensions to date, and an additional 18 applications are pending. None have been rejected.

"Limerick is a prime example of security problems and risks that we shouldn't see in an industry like nuclear power three years after September 11, yet we do," said Brendan Hoffman, a nuclear energy organizer with Washington, D.C.-based Public Citizen. "A reactor with the same design as Limerick would never be built today. The industry and the NRC's soft approach is unacceptable." Public Citizen released a report last week criticizing the inadequacy of domestic security measures that have been taken since the September 11 attacks across a spectrum of industries, including nuclear; it is available at http://www.homelandunsecured.org/.

Also, in August, the Nuclear Security Coalition, a national coalition of more than 45 groups including Public Citizen, petitioned the U.S. Nuclear Regulatory Commission (NRC) to review a security vulnerability present in the design of 32 reactors nation-wide. In those reactors, of which Limerick is one, the highly radioactive spent fuel is stored about five stories above ground and outside the reinforced containment dome that houses the reactor, making it especially vulnerable to aircraft penetration.

Further, the groups pointed to NRC's misguided new plan to allow the private security firm Wackenhut to train and manage the adversary teams that perform "force-on-force" mock terrorist attacks against nuclear plants to measure readiness. Wackenhut already guards nearly half the

Public Citizen

Public Citizen is a national, nonprofit consumer advocacy organization founded in 1971 to represent consumer interests in Congress, the executive branch and the courts. We fight for openness and democratic accountability in government, for the right of consumers to seek redress in the courts; for clean, safe and sustainable energy sources; for social and economic justice in trade policies; for strong health, safety and environmental protections; and for safe, effective and affordable prescription drugs and health care. http://www.citizen.org/

Alliance for a Clean Environment (ACE)

ACE is a non-profit organization based in the Greater Pottstown Area, working on protecting the rights of citizens against the powerful industries which poison our air, water, soil, and food, and consequently threaten our health. ACE's main goal is prevention of unnecessary health and safety risks. ACE believes the Limerick Nuclear Power Plant presents unnecessary threats to both the health and safety of the entire region, which would be eliminated if the plant would close. We cannot afford a renewal of its operating license. http://www.acereport.org/

The Radiation and Public Health Project

The Radiation and Public Health Project is a nonprofit group consisting of scientific and health professionals. Members have published twenty medical journal articles and five books since 1994.

http://www.radiation.org/

Nuclear Reality Campaign

The Nuclear Reality Campaign was founded in 2004 as a national student-youth network to oppose both nuclear power and nuclear weapons. http://www.nrcwatch.org/ Nuclear "Near Misses" at U.S. Reactors Since

Terrorists - Not The Only Threat!

Greenpeace Report On NRC documentation States

Limerick Nuclear Power Plant

Is A Clear And Present Danger, A Potential Chernobyl There were already 2 "Near Misses" at Limerick Nuclear Plant

Unit 2 in 2001 Unit 1 in 1995 Limerick Containment Is Substandard, Meaning If An Accident Occurred, Much More Radioactivity Would Be Released.

www.greenpeace.org/an-american-chernobyl

