

# **INDUSTRY UPDATES**

### **OPERATOR SHORTAGES AFFECTING INDUSTRY PERFORMANCE**



For the nation's top nuclear regulator, lapses by security guards at the Turkey Point power plant took a back seat Tuesday to concerns about its overworked reactor operators.

Dale Klein, chairman of the Nuclear Regulatory Commission, visited Florida Power & Light's complex along South Biscayne Bay and pronounced the facility safe, secure and in good shape -- but also as seriously understaffed as any nuclear plant in the country. NRC inspections of Turkey Point going back two years describe plant workers' concerns about overtime, with operators routinely working 72-hour weeks or longer.

"This is the first time I've delivered a message of this magnitude" on a nuclear plant's human performance issues, said Klein, during a conference call with South Florida newspaper reporters following his five-hour visit to the site east of Homestead.

While the tour was not a formal inspection, Klein said he was satisfied overall with the operation and conditions of the state's oldest nuclear facility. He also said he was pleased with FPL's plan to correct staff shortages by the end of 2009.

"They clearly understand what they need to do to meet our expectations," he said. But Klein said that, in the view of federal regulators, FPL had let an industry-wide concern of a shortage of qualified reactor operators get out of hand -- at least at Turkey Point. Personnel shortages at FPL's nuclear plant in St. Lucie County were not significant, he said.

Klein said Turkey Point had fallen "way behind" in filling openings, a problem he partially blamed on previous plant management reducing staff to stay competitive. He also said FPL's training programs weren't strong enough and didn't start soon enough.

"A lot of operators are complaining about the overtime they do," said Klein, who met with about 150 plant employees as well as site managers.

"This is the message we want to send. We sent it very clearly and very bluntly."

The NRC chair also said he is convinced that Turkey Point won't see a repeat of security lapses that have earned FPL six-figure fines in recent years. The NRC has proposed fining

Inside this issue:	
Operator Shortages Affecting Industry Performance	1
Nuclear News Briefs	2-3
The First New US Order Georgia	1-4
NWI Consolidates	4
NWI News Board	4

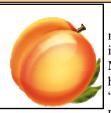
FPL \$130,000 for multiple incidents from 2004 to 2006 of sleeping or "inattentive" Wackenhut-supplied security guards. The utility also has agreed to pay a \$208,000 fine for two Wackenhut guards who had removed firing pins from their weapons. Dick Winn, a spokesman for FPL, said the utility had gotten the message on hiring more plant operators well before Klein's visit.

#### STAFF INCENTIVES

Last year, he said, FPL began "aggressive" incentive efforts to retain existing staffers and recruit and train new ones -- a process that takes 18 months. By the end of 2009, he said, FPL hopes to add 31 newly licensed nuclear operators to the existing staff of around 43.

(Posted on Wed, May. 14, 2008, BY CURTIS MORGAN, Miami Herald, cmorgan@MiamiHerald.com)

# The First New US Order...Georgia



A long awaited announcement of procurement of a nuclear power reactor was realized in April of 2008. From the DOW Jones Newswires (April 9, 2008), a press release of historic proportions was released stating that "Westinghouse to build first U.S. nuclear plants since '78. Nuclear power may be

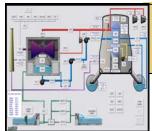
making a comeback in the U.S., as Westinghouse Electric Co., a unit of Japanese Toshiba Corp. (6502.TO), said Tuesday it has signed a deal with Southern Co.'s (SO) Georgia Power unit to build the first nuclear power plants in the U.S. since 1978.

Tellingly, that was the year before the Three Mile Island accident, which is largely credited with souring the U.S. public on nuclear power.

The deal underlines the growing demand for new power sources because of the skyrocketing price of traditional carbonbased fuels, such as coal and oil. "Agreements like the one announced with Georgia Power will also ensure that the United States will have the power it will need to support long-term economic growth," said Westinghouse Chief Executive Steve Tritch in a statement. The company added that the deal "further



Summer 2008 Volume 4, Issue 3



# NUCLEAR NEWS BRIEFS

### TVA to design concept plan for nuclear waste

### reprocessing plant

The Tennessee Valley Authority has received \$4 million to develop a conceptual design for a nuclear waste reprocessing plant that could end up as a demonstration facility built on the former Clinch Breeder Reactor site.

TVA president and chief executive officer Tom Kilgore said today in an interview that TVA has long-term plans to use the site for development of a small scale nuclear waste reprocessing facility to demonstrate technology that the United States hopes to develop as nuclear power again rises to prominence. Another possible site for the facility would be "somewhere on the Oak Ridge Reservation," where Oak Ridge National Laboratory, the Y-12 weapons plant and the East Tennessee Technology Park are located, said Kilgore.

"It's a long-term project," he said, that ultimately would "get into the billions of dollars" if plans come to fruition. The plant would be a demonstration facility a "10th or 20th" the size of a production-sized reprocessor, he said. The funding is part of a recent memorandum of understanding between TVA and DOE that the Energy Department announced as a collaborative effort to deal with issues of nuclear waste as part of its Global Nuclear Energy Partnership.

The Clinch Breeder property was the planned site of a breeder reactor under development by the Department of Energy but cancelled in 1983 after costs escalated.

## Alberta faces fight for reactor; Saskatchewan in talks over nuclear plant

Alberta and Saskatchewan are competing to house Western Canada's first commercial nuclear power plant, Saskatchewan's Natural Resources Minister Bill Boyd confirmed Tuesday.

The energy point man for the recently elected and decidedly pro-business Saskatchewan Party said his government has held "early" talks with Bruce Power LP, the private nuclear operator from western Ontario, which laid out plans in March for a \$10billion-plus nuclear complex near Peace River, in Alberta's northwest Peace Country, operating by 2017.

(Cont. next page)

# The First New US Order...Georgia (Cont. from p.1)

proves" a "nuclear renaissance has moved beyond the planning stage." Under the deal, Westinghouse, in partnership with the Shaw Group Inc. (SGR), would build two AP1000 nuclear power plants near Waynesboro, Ga. The town bills itself as "The Bird Dog Capital of the World" on its website. Already the site of two nuclear reactors, it had a population of 5,800 in the year 2000.

Westinghouse previously announced it is in talks to build four nuclear reactors in the U.S. The other two would be built in South Carolina."

In another nuclear publication released to the nuclear power community (PROS Release—Bob Myer (April 8, 2008), "April 8, 2008 Georgia Power has signed a contract with Westinghouse for engineering, procurement and construction of two AP-1000 PWRs at Vogtle Nuclear

#### Power Station.

Westinghouse Electric Company LLC and The Shaw Group Inc.'s will be the first firm order for new nuclear plants in the United States. China has ordered four AP-1000's July 2007. The first China unit is now under construction. The AP1000 has been identified as the technology of choice for no less than 12 other proposed nuclear plants in the United States. The two AP1000 nuclear units will have an electric generating capacity of approximately 1,100 megawatts for each unit.

Under the agreement, the Westinghouse and Shaw consortium will supply and construct the entire facility with the exception of certain items provided by the co-owners. The NRC has opened the Office of New Construction in Atlanta last year. This coincides with more possible orders to come in NRC Region II. A Westinghouse official stated that Westinghouse can only startup five nuclear units a year, everyone else will have to wait in line



### or order a BWR.

The Areva plants are not yet certified by the NRC and when construction starts the NRC has stated that the certification of new plants will go to the bottom of the list. Those that order now will be at the front of the line.





# **NUCLEAR NEWS BRIEFS**

(Cont. from page 2)

### Nuclear Industry Executives Receive Call to Action to Address Nation's Energy, Environmental Goals

CHICAGO, May 6 / PRNewswire-USNewswire/ --

The nation's push to increase the use of carbon-free energy technologies is coupled with unprecedented electric infrastructure needs. These requirements make it imperative that private and public sectors rise to the challenge of building new nuclear plants, industry leaders said here today at the Nuclear Energy Institute's annual conference.

"No matter who is elected president in November, it seems clear that climate change will dominate the national debate over energy and environmental policy in 2009 and beyond," said NEI President and Chief Executive Officer Frank L. (Skip) Bowman. "Whether you believe the scientific evidence justifies mandatory controls on carbon or not, there is one fact on which we can all agree: There is no credible strategy to address the conundrum of climate change and increasing electricity demand unless nuclear power is part of the portfolio."

"Simply put, there is a growing need for new baseload generating capacity. This nation cannot afford to use natural gas as virtually its sole fuel," he said, adding that technology capable of capturing carbon emissions from coal-fired power plants is "a long time away." The nuclear energy industry's world-class performance over the past several years provides a solid platform for a new era of nuclear plant construction, Rowe said.

U.S. nuclear power plants in 2007 posted record highs in electricity production and efficiency. U.S. nuclear plants generated approximately 806 billion kilowatt-hours (kwh) of electricity last year, exceeding by more than two percent the previous recordhigh set in 2004. Nuclear energy generates nearly 20 percent of total U.S. electricity supply, even though nuclear power plants constitute only about 10 percent of electric generating capacity.

The 104 reactors also achieved a record-setting average capacity factor. The 2007 average of 91.8 percent surpassed the 2004 record of 90.1 percent. Capacity factor is the ratio of electricity actually produced compared to the theoretical maximum electricity a power plant can produce operating at full power year-round.

The industry's average electricity production cost--encompassing expenses for uranium fuel and operations and maintenance--also set a record low last year. The average production cost was 1.68 cents/kwh in 2007, besting the previous low of 1.72 cents/kwh set in 2005, according to preliminary data.

Within the past year, nine license applications for as many as 15 possible new reactors have been filed with the U.S. Nuclear Regulatory Commission, and between seven and 11 more license applications are expected to be filed this year.

Skip Bowman, president and CEO of the <u>Nuclear Energy Insti-</u> <u>tute</u>, told nearly 500 industry executives gathered in Chicago for the Nuclear Energy Assembly that a factual presentation and reasoned approach would make the nuclear resurgence a reality. He marshaled several facts to make his point:

- One million megawatts of electricity-generating capacity powers America's grid, but 45 percent of that infrastructure is more than 30 years old. Meanwhile, the nation has deferred investment in new, more efficient baseload plants, including new reactors.
- The 2005 Energy Policy Act's loan guarantee program is a "very small step" in the right direction, but insufficient to rebuild electric power infrastructure.
- The nation and world are seeking clean-air energy sources, like nuclear, to address climate change.
- Electricity demand will increase by 25 percent by 2030, according to government officials.

"There is no credible strategy to address the conundrum of climate change and increasing electricity demand unless nuclear power is part of the portfolio," Bowman said.

### ESBWR for FERMI

The NRC now notes that Detroit Edison has selected GE-Hitachi's Economic Simplified Boiling Water Reactor (ESBWR) as the design reference for a new unit planned at its Fermi site in Michigan. The company plans to submit a COL application by the end of 2008. Detroit Edison's parent company, DTE Energy, is part of the NuStart consortium of utilities and reactor vendors including GE-Hitachi and Westinghouse. Two COL applications for ESBWRs have already been accepted for review by the NRC, including one from the NuStart consortium.

The Nuclear Energy Institute is the nuclear energy industry's policy organization. This news release and additional information about nuclear energy are available at <u>http://www.nei.org</u>.



### **NWI Consolidates Services into Consulting Company**



Starting the first of July of 2008, NWI Services, Inc., a staffing augmentation company, is being consolidated under NWI Consulting, LLC and will no longer exist as an individual entity. This streamlining of these two organizations will improve administrative efficiency and centralize services and increase the scope of technical and leadership support offerings for our existing clients and new customers. NWI Consulting, LLC will retain its corporate name and offices and staff. However, the new mailing address has changed and is; P.O. Box 33117, Knoxville, TN 37930-3117.



- Rob Brixey has been named NWI's project manager on the new ESBWR development project for Exelon.
- After a short support stint at LaSalle in late 2007, Bill Cheever is now full time at Hope Creek supporting their NLO, ILT and LORT programs.
- NWI acting Entergy QA Corp Manager, Ernie Harkness has joined Entergy's Nuclear Safety Review Board.
- After spending last year at LaSalle County Station for NWI, Terry Johnson is now supporting Bruce Power's Maintenance training improvement initiatives for 2008.
- Dr. Ray Waldo has teamed up with NWI to support Bruce Power by providing operations and training oversight.
- For the third year in a row and after excellent NRC Exam results, NWI has been asked to support DC Cook's NRC exam preparations in 2008. NWI's Steve Pettinger has returned to Cook to support exam development.
- Roger Armitage will support the upcoming SONGS Simulator Assessment scheduled for May 2008 following major modifications of the I/O and rewiring upgrade.
- Mark Carey, Ken Gerling, and Dan Slater continue to support Turkey Point's operations training recovery. Slater provides additional support in the Maintenance and Technical area of ASER preparations.



We wish to express special thanks to the following clients for recently making NWI a preferred full services company.

- AEP's D.C. Cook Nuclear Power Plant
- APS's Palo Verde Nuclear Station
- Bruce Power
- FPL's Turkey Point Plant
- SCE's San Onofre Nuclear Generating

#### Station

- PSEG's Hope Creek Station
- Exelon's New Reactor Development Group
- NWI Director, Marketing



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Our program specialties include: Human Performance, Training and Accreditation, Simulator Instructor Training, Operations Training, Engineering Services, Corrective Actions Program Improvement, Root Cause Analysis and Self-Assessment, NRC Exam Writing, CBT for Dry Cask Storage/ RadWaste Training, and many Human Performance Trainers.