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Nuclear Industry Updates

Japan Marks 4th Anniversary of Quake-Tsunami Disaster

March 11, 2015 — Japan recently commemorated the fourth anniversary of the quake-tsunami disaster which swept away thousands of victims and sparked a nuclear crisis, while survivors are still struggling to recover from the tragedy. Remembrance ceremonies were held in towns and cities around the disaster zone and in Tokyo, where Emperor Akihito and Empress Michiko are to lead tributes to those who died in Japan's worst peacetime disaster. A national moment of silence is to follow the cry of tsunami alarm sirens which will be set off at 0546 GMT (1:46 pm Malaysian time), the moment a 9.0-magnitude undersea quake hit.); Its gigantic force unleashed a towering wall of water that travelled at the speed of a jet plane to the coast. Within minutes, communities were turned to matchwood, and whole families drowned. The National Police Agency said a total of 15,891 people are confirmed to have died in the disaster with another 2,584 still listed as missing. Human remains are sometimes still found years later. Thousands of people afflicted by the tsunami remain unable to turn the page on the horror of 2011. For them, grief is frozen in time because they cannot find the bodies they need to mourn. "Somebody needs to do this,

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Inside this issue:

NRC Issues Annual Assessments for Nation's Nuclear Plants

March 6, 2015 — The Nuclear Regulatory Commission has issued annual letters to the nation's 100 commercial nuclear power plants operating in 2014 regarding their performance throughout the year. As of the end of December, 94 plants were in the two highest performance categories.

"These assessment letters provide the results of a systematic NRC review of performance indicators and inspection findings at each domestic power reactor facility," said Bill Dean, director of the Office of Nuclear Reactor Regulation. "In addition to ensuring that the nation's nuclear power plants are safe by inspecting them and evaluating their performance regularly, our goal in issuing these letters is to ensure that all of our stakeholders clearly understand the basis for our assessments of plant performance, our future inspection plans, and the actions we are taking to address any notable deficiencies."

Of the 94 highest-performing reactors, 75 fully met all safety and security performance objectives and were inspected by the NRC using the normal "baseline" inspection program. (This group includes the Vermont Yankee plant, which permanently shut down in late December and is now transitioning to decommissioning status.)

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Most Safety-Significant Improvements on Target for 2016 Completion

March 11, 2015 — Reflecting on the fourth anniversary of the tsunami that triggered the Fukushima Daiichi nuclear power plant crisis, Stephen G. Burns said in a speech that the Fukushima Daiichi accident "underscored the importance of international cooperation in promoting nuclear safety around the world."

In a March 10 speech prepared for delivery at his agency's 27th annual Regulatory Information Conference, Stephen G. Burns, chairman of the Nuclear Regulatory Commission, provided an update on the safety improvements made by U.S. nuclear power plants during the four years since a March 11, 2011, earthquake and tsunami triggered the Fukushima Daiichi nuclear power plant crisis in Japan. Burns said in the speech that the Fukushima Daiichi accident "underscored the importance of international cooperation in promoting nuclear safety around the world." The magnitude 9 earthquake caused multiple tsunami waves, up to a maximum height of 128 feet that hit the Japanese coastline. More than 18,000 people were killed.

A former NRC general counsel, Burns was nominated and confirmed to the commission in November 2014 and then designated as its chairman in January 2015. He discussed "right sizing" the agency in light of trends in the U.S. industry. A forecasted wave of new reactor licensing did not happen as anticipated, but NRC's workload increased in other areas, Burns said. "For example, we've seen the agency's – and the industry's – response to the Fukushima Daiichi accident, the unexpected decommissioning of several reactor units, as well as other areas of workload increases, such as cyber security, preparing and reviewing licensing applications for medical isotope production, and small modular reactors. Additionally, the NRC is readying itself to receive and review reactor renewal applications that could propose an extension of an existing reactor's life beyond 60 years. The NRC has also initiated an effort to stabilize and improve the agency's existing reactor amendment licensing backlog through reallocation of resources from lower priority work and an expanded use of contract support. Although we do not anticipate complete resolution of the backlog this fiscal year, the agency is making progress. Accordingly, 40 years following its creation, the NRC's adjustment of its organization, while necessary to remain an effective and efficient regulator, will also need to be well thought out and carefully implemented."

He said NRC and the U.S. nuclear industry "took swift and decisive action to address many of the key lessons learned from [the Fukushima Daiichi] event. Due to the extraordinary effort of the NRC staff and industry, a number of significant enhancements to safety have already been implemented at nuclear power plants, and the vast majority of the most safety-significant actions are targeted for completion by the end of 2016. One of my priorities is to see that we do all that we can to meet that goal.

The NRC's lessons learned initiatives have and will continue to result in significant safety improvements at U.S. nuclear power plants. NRC is committed to bringing the remaining enhancements to timely closure," Burns said, adding that the accident underscored the importance of international

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Most Safety-Significant Improvements on Target for 2016 Completion

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cooperation in promoting nuclear safety around the world. That effort included an IAEA Diplomatic Conference held in February 2015 in Vienna, Austria, related to the Convention on Nuclear Safety.

The United States and other Contracting Parties unanimously adopted the Vienna Declaration on Nuclear Safety there, a document intended to strengthen each Contracting Party's commitment to nuclear safety in the wake of the Fukushima Daiichi accident. "Under the three principles of the Vienna Declaration, new nuclear power plants are to be designed, sited, and constructed consistent with the objective of preventing accidents during commissioning and operation; comprehensive and systematic safety assessments are to be carried out periodically and regularly for existing facilities during their lifetime; and national requirements and regulations to address these principles are to take into account the relevant IAEA Safety Standards and other good practices.

The NRC will continue to work with its counterparts to ensure these principals are given meaning, as we have already done through the safety enhancements adopted in this country since the accident," he explained.

Researched and written by World Nuclear News

New Guidance on Low-Level Radwaste Will Save Industry 'Millions'

March 5, 2015 — The U.S. Nuclear Regulatory Commission last week issued two final guidance documents on managing low-level radioactive waste (LLRW) from nuclear reactor operations that could result in substantial savings for the nuclear energy industry while maintaining rigorous safety standards.

NEI Senior Technical Advisor Ralph Andersen said the agency's new guidance is the culmination of years of intensive collaborative effort with the NRC that included the Nuclear Energy Institute, the Electric Power Research Institute and the industry at large. "In particular, EPRI's well-conceived long-term research program provided the essential technical foundation for our successful advocacy for new risk-informed flexibility in categorizing, reporting and disposing of low-level radioactive waste," Andersen said.

The NRC's Regulatory Issue Summary (RIS) 2015-02 will allow reactor operators to more accurately report the quantities of four key radionuclides in low-level radioactive waste before it can be transported to a disposal site. The risk-informed flexibility in the new guidance will greatly decrease the excessive conservatism in reporting requirements for those radionuclides, Andersen said, and the more realistic assessments of actual inventories of waste at disposal sites will extend the sites' useful lifetimes. As the RIS notes, "Overestimation of disposal site inventory could lead to premature loss of disposal system capacity."

Clay Lemons, lead scientist for Duke Energy's nuclear fleet laboratory services, said the (Cont. on Page 4)

New Guidance on Low-Level Radwaste Will Save Industry 'Millions'

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revised RIS will help nuclear reactor licensees optimize their waste packaging and transportation operations by allowing operators to report lower, more accurate levels of radioactive materials in waste transport manifests than the potentially much higher "lower limit of detection" values that previously had to be reported.

Andersen added that the more accurate reporting guidelines also will reduce the need for existing LLRW disposal sites to obtain license amendments to increase their capacity as well as the need to site new disposal facilities. "This guidance will accommodate extended operations for the disposal facilities and the ultimate decommissioning of nuclear energy facilities," he said. The NRC also issued its Branch Technical Position on Concentration Averaging and Encapsulation (CA BTP), which allows a risk-informed, performance-based approach to classifying low-level waste materials for disposal (as Class A, B or C, with Class A the most benign) based on the radioactivity concentration of blended mixtures in the waste. The guidance is the first revision since 1995.

Graham Johnson, Duke Energy's manager for nuclear fleet laboratory services, said he and Lemons were part of an industrywide committee that worked with the NRC for about three years to make the concentration averaging guidance more flexible. "The revised CA BTP implements a risk-informed, performance-based approach to blending low-level wastes that makes the hazard of the final mixture the primary consideration," Johnson explained. "The new guidance is an improvement that will allow some low-level wastes to be classified after blending as Class A wastes, which have an easier path to disposal." Andersen noted that the new approach to LLRW blending and classification should save the industry "millions" over the course of the reactor fleet's operational lifetime.

The Concentration Averaging Branch Technical Position is available on the NRC's ADAMS document database under ML12254B065. (NUCLEAR ENERGY INSTITUTE)

More or Less Nuclear Reactors? Nation at Odds Since Fukushima

March 6, 2015 — At the same time that U.S. Senator Lamar Alexander (R-Tenn.) has testified before nuclear regulators that more, not less, nuclear reactors are needed, groups including Friends of the Earth, Greenpeace, the Nuclear Information and Resource Service (NIRS), Public Citizen, and the Sierra Club, are making a push with a new Web initiative to shut nuclear down. Interestingly, next week marks the four year anniversary of the Fukushima nuclear reactor disaster. In his testimony, Alexander discussed solving the stalemate on nuclear waste, avoiding excessive regulation of nuclear plants, licensing new and existing reactors in an efficient manner, and making sure the Nuclear Regulatory Commission (NRC) is running effectively as keys to unleashing nuclear power in the United States.

U.S. Senator Lamar

"We must solve the 25-year-old stalemate about what to do with used fuel from our nuclear reactors to ensure that nuclear power has a strong future in this country," Alexander said at a hearing of the Appropriations Subcommittee on Energy & Water Development, which he chairs. "But let me be

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More or Less Nuclear Reactors? Nation at Odds Since Fukushima

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clear: Yucca Mountain can and should be part of the solution. Federal law designates Yucca Mountain as the nation's repository for used nuclear fuel."

Alexander plans to reintroduce legislation with Senators Dianne Feinstein (D-Calif.), Lisa Murkowski (R-Alaska) and, perhaps, others to create both temporary and permanent storage sites for nuclear waste in addition to Yucca Mountain. He also plans to include a pilot program for nuclear waste storage in the subcommittee's appropriations legislation for fiscal year 2016.

Leading environmental organizations, however, are not only for fewer nuclear reactors, they want a future free of nuclear. The initiative, as laid out on the Make Nuclear History Web site claims, "There is a solution to climate change without nuclear energy…Now is the time to create our fossil and nuclear-free future…A fossil and nuclear-free future powered by renewable sources is possible and the transition is happening now. The benefits of clean, affordable and renewable energy compared with the dirty, expensive legacy of fossil fuels and nuclear reactors are obvious."

"The Fukushima disaster shows us exactly why we cannot and should not try to rely on nuclear energy to solve the climate crisis," said Tim Judson, executive director of NIRS. "Japan's decision to invest in nuclear rather than renewables left the country totally unprepared when calamity struck. Clean, renewable energy sources are abundant, affordable, and ready to go. They can replace nuclear and fossil fuels, which are two sides of the dirty, extreme energy coin."

The Fukushima Daiichi nuclear plant disaster in Japan in spring of 2011 prompted the U.S. Nuclear Regulatory Commission to establish a task force to recommend how U.S. plant owners can better protect their facilities; however, the NRC has done much less when it comes to the more recent shutdown of the Fort Calhoun nuclear plant in Nebraska. What happened at Fort Calhoun was not nearly as dramatic as Fukushima, but that doesn't negate the safety problems discovered during the outage -- many of which date back to when the reactor was built more than 40 years ago and prevented the reactor from restarting for two and a half years.

Unlike its response to the Fukushima accident, however, the NRC has not examined the underlying causes of the Fort Calhoun shutdown, which could pose a threat to the U.S. nuclear fleet -- or, in a worst-case scenario, lead to an "American Fukushima," according to Dave Lochbaum, director of the Nuclear Safety Project at the Union of Concerned Scientists and author of "No More Fukushimas; No More Fort Calhouns."

Sen. Alexander noted that the NRC has not requested money in the President's budget to continue the licensing of Yucca Mountain, even though the commission will need more than its current unspent balance, and there is about $36 billion available in the Nuclear Waste Fund. "Knowing that there are additional steps and they will cost money, why would you not request additional funds in your budget?" Alexander said.

FIERCE ENERGY By Barbara Vergetis Lundin

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Global Industry Highlights....

Nuclear generating capacity rises in 2014. January 5, 2015 — Global nuclear generating capacity increased slightly in 2014 as five new reactors began supplying electricity, while just one was permanently shut down. The year saw new reactors with total capacity of 4763 MWe connected to the grid: Ningde 2, Fuqing 1 and Fangjiashan 1 in China; Atucha 2 in Argentina and Russia's Rostov 3. An uprate at the existing Fermi 2 unit in the USA saw a further 15-20 MWe added. The world starts 2015 with 436 operable reactors and a total nuclear generating capacity of some 377.7 GWe, compared with 435 reactors and generating capacity of 375.3 GWe a year ago. Construction started on three nuclear units during the year. As well the second unit of the Ostrovets nuclear power plant in Belarus, construction also began on the third unit of the Barakah plant in the United Arab Emirates. 2014 also saw first concrete poured for Argentina's prototype CAREM-25, a domestically-designed and developed small integral reactor. The start of work on these units brought the number of reactors under construction to 70, totaling almost 74 GWe in capacity. In late December, Entergy shut down its 604 MWe Vermont Yankee plant in the USA after 42 years of service, marking the only reactor closure during 2014. Although safety regulators had granted a license for the unit to operate until 2032, Entergy decided in 2013 to close it early for economic reasons. Also in 2014, units 5 and 6 of Japan's Fukushima Daiichi plant were officially classed as being decommissioned. Owner Tokyo Electric Power Company (Tepco) announced in late 2013 that it did not intend to restart the reactors, which were relatively undamaged by the March 2011 earthquake and tsunami that led to the wreckage of units 1-4. As 2014 drew to a close, Japan once again found itself without nuclear power as its entire fleet of 48 reactors remained shut down pending regulatory reviews. The Nuclear Regulation Authority gave approval during 2014 for the restart of four units, but these have yet to resume operation. Safety assessment applications for 17 other reactors remain at the review stage.—Researched and written by World Nuclear News

Chinese reactors approach commercial operation. March 13, 2015 — Two new Chinese nuclear power units - Yangjiang 2 and Ningde 3 - have moved closer to commissioning by being connected to the grid and achieving first criticality, respectively. Unit 2 of China General Nuclear's (CGN's) Yangjiang nuclear power plant in Guangdong province was connected to the grid on 10 March. The company said the reactor will enter commercial operation once it has successfully completed a test run lasting 168 hours. Yangjiang 2 is the second of four CPR-1000 pressurized water reactors being built at the site by CGN. Construction of unit 1 started in December 2008, with work on unit 2 beginning in 2009, unit 3 in 2010 and unit 4 in late 2012. The first unit began commercial operation in March last year, with unit 2 expected to start up in mid-2015. Construction of two further units at Yangjiang - both ACPR1000 reactors - began in 2013. All six units are scheduled to be in operation by 2019. Ningde 3 goes critical: Meanwhile, Unit 3 of CGN's Ningde nuclear power plant in Fujian province achieved first criticality on 7 March. The 1020 MWe CPR-1000 pressurized water reactor is one of four being built at the site. Construction started on units 1 and 2 in 2008 and they are both now producing power. Unit 3 is slated to come online early this year and unit 4 to follow in 2016.
Ningde nuclear power plant is built across three small islands near Fuqing City in the northeast of Fujian province. The plant is co-owned by China General Nuclear Power Corporation (CGN), with a 46% stake, China Datang Corp (44%) and Fujian Energy Group (10%).—*Researched and written by World Nuclear News*

South Korea opens regulator training simulator. March 13, 2015—**A ceremony was held today to mark the official opening of a new simulator for training nuclear regulatory personnel, the Korea Institute of Nuclear Safety (KINS) announced.** The ceremony was attended by representatives of organizations including KINS, the Nuclear Safety and Security Commission, the Korea Atomic Energy Research Institute and Korea Hydro and Nuclear Power. The simulator - based on the indigenously designed APR1400 reactor - was developed at a cost of KRW 75 billion ($66 million). Regulatory workers will be able to take part in exercises in the simulator, which resembles the control room of a nuclear power plant. It will help them understand the main auxiliary systems of the plant, KINS said. The simulator will be used to strengthen the response capacity of regulatory personnel in the event of an emergency situation at a nuclear power plant. KINS noted that it expects the simulator to be used for training not only Korean regulators, but also from those abroad. *Researched and written by World Nuclear News*

Tigard Company Works to Make Small Nuclear Reactors a Reality Across the Planet

March 5, 2015—Tigard is known for many things. Traffic, Washington Square mall, its annual Festival of Balloons, but chances are that few people have ever associated the city with the future of nuclear power. One local company, however, is hoping to change that, with plans to build small nuclear reactors across the globe over the next several years. Tigards' NuScale Power Inc is working to submit an application the U.S. Nuclear Regulatory Commission to begin construction on several small nuclear reactors across the country. You likely have driven right by NuScale Power Inc. and didn't even realize it was there. The building is non-descript, without even a sign in front proclaiming what's inside. The company moved its headquarters to Tigard from Corvallis in the mid-2000s, drawn to Tigard because of its quick access to Portland and international travel. "Corvallis is not an easy place to get to," said Mike McGough, NuScale's chief communications officer. McGough has worked in the commercial nuclear industry for decades. He came to NuScale three years ago and said that the technology there is one of a kind. "This plant is remarkable," he said. The idea at NuScale is to create smaller, safer nuclear reactors that can shut themselves down in emergencies. The Fukushima Daiichi Nuclear Power Plant in Japan suffered major damage after an earthquake and tsunami struck the area in 2011, resulting in a nuclear meltdown at three of the plant's six nuclear reactors. That's what NuScale wants to avoid, McGough said. Nuclear science is nothing if not complicated, but McGough said NuScale's beauty is in its simplicity. "The single most important thing is that the plant is able to withstand a Fukishima-like event," he said. "Most power plants operating today, if faced with no power to run the pumps and levers and stuff like that, have only 24 to 72 hours before you have to take some sort of action to keep the core cool, before you have the fuel-melt situation that we saw at Fukishima. At the NuScale plant, it shuts itself down and cools itself off. Anyone, even you, could be a control room operator and it would be just fine."

How it works...There are 99 nuclear power plants currently operating in the U.S. They are large, complicated and expensive, McGough said. "There has got to be an easier way to do this, with a lot less equipment," he said. Unlike large-scale nuclear reactors, McGough said that NuScale's reactors could easily fit on the back of a truck. The company says its reactors are cheaper, safer and easier to move than traditional reactors. NuScales' reactors are small, and use natural circulation to move water through the reactor. In addition, several reactors can be built into one plant. In fact, he said, that's the idea. Known as small modular reactors, the idea is to have several small reactors generating electricity in one plant, McGough said. "Each module is basically a small version of a big nuclear power plant," he said.

NuScale's modular reactors measure 76 feet tall and 15 feet in diameter, a far cry from the 400-foot-tall cooling towers that have become synonymous with nuclear power. "It's a very different approach to nuclear energy," McGough said. The modules produce about 45 to 50 megawatts of electricity each — enough electricity to power the city of Tualatin. Several modules can fit into the space of a traditional nuclear plant, and the modules can be built in a factory and trucked to their eventual sites which reduces the costs, McGough said. NuScale has designed its modules to be installed in underground pools containing 8 million gallons of water that hold up to 12 of the small reactors. NuScale Power has operated an electrically-fed small nuclear reactor at Oregon State University and this year built another test facility in Italy. First plant could be operational by 2023. The company has made some major strides in the past few years. In 2013, it received a $217 million grant from the U.S. Department of Energy to design and license a nuclear power plant. The company is spending about $12 million a month to finish up its application to the NRC and has filed more than 180 patents related to the technology, McGough said. "We're working quickly to submit to the Nuclear Regulatory Commission to finalize the design," he said.

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Japan Marks 4th Anniversary of Quake-Tsunami Disaster

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walking along the shore," said Takayuki Ueno, who combed a desolate winter beach during the weekend for the bones of his three-year-old son killed by the monstrous tsunami. "Otherwise there is no possibility that anyone will be found," said the 42-year-old man whose daughter and parents were also killed by the tsunami in northern Fukushima. Massive waves also crashed into the Fukushima nuclear plant, triggering reactor meltdowns and explosions, and setting off the worst atomic crisis in a generation. The crippled plant remains volatile and the complicated decommissioning process is expected to last for decades, as fears persist over the health effects of leaked radiation. Tens of thousands were evacuated from the stricken area. Despite the government pledging billions of dollars in reconstruction aid, progress in disaster-hit regions has been slow, some communities remain ghost towns, and thousands of disaster refugees struggle to cope. According to the government, more than 80,000 survivors still live in temporary houses, while nearly 230,000 people, mostly evacuees from Fukushima, are taking refuge. "Reconstruction is shifting to a new stage," Prime Minister Shinzo Abe told a news conference on Tuesday. "We will help disaster victims become self-sustaining," Abe said. "As the government, we will provide the best possible support." (AFP)

Tigard Company Works to Make Small Nuclear Reactors a Reality Across the Planet

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The company built a full-size steam generator test facility in Piacenza, Italy, earlier this year, and operates a 1/3-scale test facility at Oregon State University that runs on electricity. Earlier this year, the company announced it would open an office in Charlotte, N.C., hiring an additional 70 people to its staff of more than 200.

It's been a busy year for the company, but there's plenty more work yet to do. After it submits its application to the NRC, it will be another three to four years before those designs can be approved. "Our first customer should be able to begin constructing their first plant sometime in 2020," McGough said. That customer is the Utah Area Municipal Power System, which plans to build its plant in Idaho. That plant could be operational as early as 2023, McGough said.

The company hasn't been without criticism, though. In 2013, a Washington, D.C., think-tank challenged the company's cost and safety claims. Small modular reactors "are a poor bet to solve nuclear power's problems, and we see many troubling ways in which SMRs might actually make the nuclear power industry's current woes even worse," said Arjun Makhijani, the president of the Institute for Energy and Environmental Research, an anti-nuclear energy think tank based in Washington, D.C.

Friends of the Earth, an advocacy group, called the technology 'imaginary' in 2013, saying that the technology would need massive government subsidies in order to be competitive in the marketplace. McGough said the project is far from imaginary. "This isn't a paper reactor," he said. "We don't just have drawings about it. We have had an operational, electrically heated unit running since 2003. We know all this stuff works. This technology will absolutely change the world. It will change the way we deliver electricity and it will change the way that the world views nuclear electricity."

NuScale plans to submit its 12,000-page application to the U.S. Nuclear Regularity Commission late next year. (Written by Geoff Pursinger)

NRC Issues Annual Assessments for Nation's Nuclear Plants

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Nineteen reactors were assessed as needing to resolve one or two items of low safety significance. For this performance level, regulatory oversight includes additional inspection and follow-up of corrective actions. Plants in this level are: Calvert Cliffs 2 (Maryland); Clinton (Illinois); Davis Besse (Ohio); Diablo Canyon 1 and 2 (California); Fermi 2 (Michigan); Fitzpatrick (New York); Limerick 1 and 2 (Pennsylvania); Millstone 3 (Connecticut); Oconee 1 (South Carolina); Oyster Creek (New Jersey); Palisades (Michigan); Point Beach 2 (Wisconsin); River Bend (Louisiana.); Salem 1 (New Jersey); St. Lucie 1 (Florida); Waterford (Louisiana) and Wolf Creek (Kansas). Fermi, Oyster Creek, and Wolf Creek have resolved their issues since the reporting period ended and have transitioned to the highest performing level.

Three nuclear reactors were in the third performance category with a degraded level of performance. For this category, regulatory oversight includes more NRC inspections, senior management attention and oversight focused on the cause(s) of the degraded performance. These plants were Monticello (Minnesota); Pilgrim (Massachusetts) and Point Beach 1 (Wisconsin). Monticello has resolved some of its issues since the reporting period ended and has transitioned to the second highest performing level.

Two reactors, Arkansas Nuclear One 1 and 2, were in the fourth performance category, requiring increased oversight because of two safety findings of substantial significance. This oversight will include several additional inspections and frequent NRC management involvement to confirm the performance issues are being addressed.

The Fort Calhoun plant in Nebraska is currently under a special NRC oversight program distinct from the normal performance levels because of an extended shutdown associated with significant performance issues. In December 2013, the NRC oversight panel cleared the unit to resume operations, but the plant will remain under special oversight until the panel recommends, and senior NRC management approves, returning it to regular oversight. Therefore, the plant will not receive an annual assessment letter. Further details on NRC's oversight activities at Fort Calhoun are available on the NRC's webpage on Special NRC Oversight at Fort Calhoun Station.

Later this spring and summer, the NRC will host a public meeting or other event in the vicinity of each plant to discuss the details of the annual assessment results. A separate announcement will be issued for each public assessment meeting. In addition to the annual assessment letters, plants also receive an NRC inspection plan for the coming year.

The NRC routinely updates information on each plant's current performance and posts the latest information as it becomes available to the action matrix summary. The annual assessment letters sent to each operating reactor are also available through the NRC's webpage on the Reactor Oversight Process. Annual construction oversight assessments for new reactors at the Vogtle and Summer sites and at Watts Bar 2 are also on the NRC website. The letters are designated "4Q/2014" under "Assessment Reports/Inspection Plans" on each reactor's webpage. Every six months each plant receives either a mid-cycle or annual assessment letter along with an NRC inspection plan.

(NEI CONTACT: David McIntyre, 301-415-8200)

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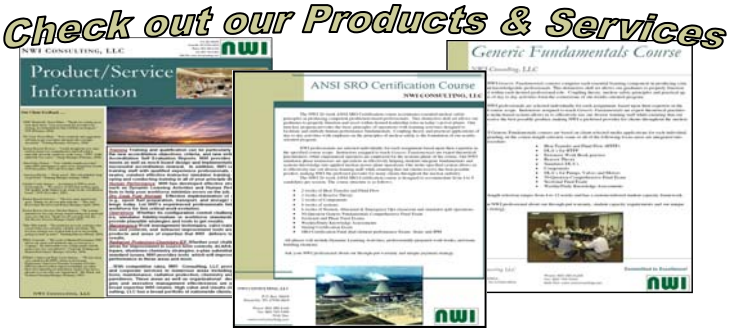

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The following key activities are being conducted by NWI professionals…

- Xcel's Monticello FLEX Project
- Entergy—FLEX, Nuclear Oversight, Performance Improvement/CAP Support, Nuclear Safety Culture Assessment
- FENOC Perry Plant's Fukashima FLEX Mod Planning/Scheduling
- Duke Energy's Catawba Performance Improvement
- INL's ATR Training & Performance Improvement
- EPRI I&C Component Failure Analysis Study

Thank You

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

- Entergy's Pilgrim, ANO, Palisades, River Bend and Grand Gulf Stations
- Xcel Energy's Monticello Nuclear Plant
- FENOC's Perry Nuclear Plant
- Duke Energy's Catawba Nuclear Station
- EPRI
- Battelle's Idaho National Laboratory

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