

## Nuclear Power: Clean Energy or Environmental Threat?

In the wake of the March 2011 nuclear disaster in Fukushima, Japan, some countries pulled the plug on nuclear programs or made plans to reduce nuclear power generation within their borders. Japan shut down all but two of its fifty-four reactors, Italy adopted a ban on nuclear power, and Germany announced plans to decommission all nuclear reactors by the year 2022. For many countries, it seems, the perceived risks of the nuclear power simply outweigh the benefits.

In contrast, other countries, including the United States, are moving forward with nuclear programs. In February of this year, the U.S. Nuclear Regulatory Commission approved licenses for two nuclear reactors, the first new licenses issued since prior to the Three Mile Island incident in 1979. The reactors will be constructed in Georgia by a consortium of utilities, and both are expected to begin operating by 2018. China announced earlier this month that it will resume its nuclear program which was suspended following the Fukushima accident, and reportedly seeks to double production by 2020. Russia, Korea, and South Africa, among others, also have plans to pursue expanded nuclear projects.

So what is driving the resurgence of nuclear power despite the risks? Nuclear power plants do not emit carbon dioxide, sulfur dioxide, or nitrogen oxides as part of the power generation process and are therefore considered by to generate "clean energy" from the standpoint of greenhouse gas emissions. See [www.epa.gov/clearenergy/energy-and-you/affect/nuclear.html](http://www.epa.gov/clearenergy/energy-and-you/affect/nuclear.html). However, it is important to note that nuclear power plants have other environmental impacts – mining for uranium fuel releases fossil fuel emissions, large quantities of water are consumed, and wastewater containing pollutants is discharged as part of the power generation process. See *id.* Some proponents of nuclear power also argue that nuclear power is more reliable, efficient, and cost-effective than other energy sources including renewable energy sources such as wind and solar energy often touted as the "clean energy" sources of the future. (This would, of course, not be true if system failures led to large scale radiation releases, and good risk planning and cost-benefits analysis should necessarily include consideration of "worst case" and "black swan" scenarios.) Based on the continuation of nuclear programs on some countries, some believe the risks can be appropriately managed.

While a thorough debate of nuclear power issues is beyond the scope of this article, it is clear that in some parts of the world, nuclear power is not yet being abandoned. In the U.S., regulators have taken steps in response to the Fukushima accident to evaluate safety at U.S. nuclear plants. The U.S. Nuclear Regulatory Commission (NRC) published "Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-term Task Force Review of Insights from the Fukushima Dai-ichi Accident" last year and more recently prioritized the recommendations into three tiers. The first tier, which are recommendations for immediate action, include the following tasks: (1) re-evaluate seismic and flooding hazards; (2) perform seismic and flooding hazard walkdowns; (3) modify station blackout (SBO) rule to require enhanced capability to mitigate prolonged SBO; (4) protect mitigation equipment from natural phenomena; (5) strengthen and integrate onsite emergency response capabilities; (6) require emergency planning (EP) staffing and communications equipment to response to multiunit events and prolonged SBO; (7) require reliable hardened vent designs in Boiling Water Reactors (BWRs) with Mark I and II containments; and (8) enhance spent fuel pool instrumentation. Tier 2 and Tier 3 actions will be initiated when sufficient technical information is available and other pre-requisites such as completion of immediate tasks or further study are finalized. <http://pbadupws.nrc.gov/docs/ML1125/ML112510271.pdf>

As these and other recommendations are developed and implemented and as further studies of the long-term health and environmental effects of radiation exposure following nuclear accidents are completed, the industry must be prepared to respond and adapt to new information and potential regulatory changes. Utilities, government, and business must continue to evaluate responsibly the risks and benefits of nuclear power and work together to insure the safety and security of nuclear facilities.

## ADDITIONAL ITEMS OF INTEREST:

**DOE to Fund Natural Gas and Biofuels Research** – In February, President Obama announced that the Department of Energy (DOE) will provide \$30 million for a research competition for development of methods to harness domestic natural gas for use in vehicles. The DOE will also provide \$14 million for algae biofuels research. This funding is made available through the Advanced Research Projects Agency – Energy, a DOE organization launched in 2009 to promote technological innovation in the energy sector.

**EPA Issues New Construction General Permit** – In February, EPA issued a new construction general permit under the Clean Water Act to replace the expiring permit. According to EPA, the new permit provides enhanced protection for impaired and sensitive waters while allowing increased flexibility for operators. For more information, go to <http://dfpub.epa.gov/npdes/stormwater/cgp.cfm>.

**Minority Investor to Settle Oil Spill Claims for \$90 Million** – MOEX Offshore 2007, a minority investor in the lease for the Macondo Well at the time of the Deepwater Horizon oil spill, has agreed to a \$90 million settlement, which include \$45 million to the U.S. for replenishing the Oil Spill Liability Trust Fund. The remainder will go to the Gulf states participating in the settlement – Texas (\$3.25 million), Louisiana (6.75 million), Alabama (\$5 million), Florida (\$5 million), and Mississippi (\$5 million). More information on the settlement is available at: <http://www.epa.gov/compliance/resources/cases/civil/caa/moex.html>.

**Refinery Modifications Result in \$1 Million Civil Penalty** – Coffeyville Resources Refining & Marketing agreed to a settlement of alleged Clean Air Act (CAA), CERCLA, and EPCRA violations resulting from refinery modifications that increased emissions without the required permitting and controls. Pursuant to the consent decree, the company will pay nearly \$1 million in civil penalties, implement pollution controls valued at over \$4 million with an additional \$6.5 million in operating costs, and implement a \$1.2 million supplemental environmental project. For more information go to <http://www.epa.gov/compliance/resources/cases/civil/caa/coffeyville.html>.

**EPA's Proposed 2013 Budget \$105 Million Below 2012 Levels** – EPA's FY 2013 budget, proposed at \$8.344 billion, is \$105 million less than the enacted FY 2012 budget. According to EPA, the budget reflects EPA's "ongoing efforts to carefully consider potential cost savings and reductions while continuing its commitment to core environmental and health protections." For more information go to <http://www.epa.gov/budget>.

**Federal Agencies Promote National Poison Prevention Week** – EPA and other federal agencies seek to promote awareness of the dangers of poisoning, including poisoning from pesticides and household chemicals, during National Poison Prevention Week – March 18-24. Poisoning is a major cause of death from injury, particularly among children under age six. More information about National Poison Prevention Week, go to [www.poisonprevention.org](http://www.poisonprevention.org).

## SPOTLIGHT ON CRIMINAL ENFORCEMENT:

**Coast Guard Inspection in Mobile, Alabama Results in Indictment** – In March, an Italian shipping company, Guiseppe Bottiglieri Shipping Company, and the chief engineer of the Motor Vessel Gottiglieri Challenger, were indicted for violations of the Act to Prevent Pollution from Ships, conspiracy, and obstruction of justice. The indictment stems from an inspection by the Coast Guard in Mobile, Alabama in January that allegedly uncovered evidence of a conspiracy to illegally dump waste oil and oil-contaminated waste water.

**Alabama Sale of Migratory Bird Feathers Results in Guilty Plea** – In February, Alexander D. Alvarez, of Atmore, Alabama pleaded guilty to misdemeanor and felony violations of the Lacey Act and the Migratory Bird Treaty Act which carry penalties of up to five years in prison and a fine of \$250,000 for each violation. Alvarez was involved in the sale of anhinga tail feathers, which is prohibited by the federal restriction on the sale of migratory birds, feathers or their parts for commercial gain.

## ATTORNEY PROFILES

**Richard E. Davis** is a partner with Starnes Davis Florie LLP. He represents clients in federal and state courts in Alabama as well as in matters involving federal and state regulatory agencies. Richard's environmental practice includes Clean Water Act, Clean Air Act, CERCLA and RCRA litigation; natural resource and property damage claims; land and water use issues, and the defense of corporations and individuals accused of environmental crimes as well as regulatory enforcement and compliance matters. Richard also defends personal injury actions based on chemical exposure. In addition, he is experienced in the prosecution and defense of claims in biotechnology and pharmaceutical litigation (including product development and professional liability), in business litigation (including fraud, breach of contract, antitrust and other unfair competition), and in insurance coverage and employee benefits disputes. Richard is a Fellow in the Litigation Counsel of America Trial Lawyer Honorary, was listed in the 2008 - 2011 editions of *Alabama Super Lawyers*<sup>®</sup> magazine for Environmental Litigation, was selected by his peers for inclusion in the 2011 and 2012 editions of *Best Lawyers in America*<sup>®</sup>—in 2011 for both Environmental Law and Natural Resources Law and in 2012 for both Litigation-Environmental and Natural Resources Law, and is Immediate Past Chair of the Alabama State Bar Environmental Law Section.

**J. Scott Dickens** is a partner with Starnes Davis Florie LLP. Scott's practice is primarily devoted to environmental and construction litigation. He has represented clients in all State and Federal Courts in Alabama, in arbitration proceedings before the American Arbitration Association and Alabama Building Commission, and in the United States Court of Federal Claims. Scott's practice includes CERCLA and RCRA litigation; architect and engineer liability claims, particularly relating to environmental issues; and construction related matters. He also frequently speaks at environmental and construction seminars. Scott is a 1996 graduate of Cumberland School of Law where he was a member of the *Cumberland Law Review*.

**Amber M. Whillock** is an associate with Starnes Davis Florie LLP. Amber's practice is primarily devoted to environmental litigation and regulatory compliance and includes defense of Clean Water Act and Clean Air Act claims; litigation of Comprehensive Environmental Response, Compensation, and Liability Act Contribution and cost recovery claims; defense of common law property damage claims; and defense of personal injury claims based on exposure to chemicals and other pollutants. While attending Cumberland School of Law, Amber was the Executive Editor of the *Cumberland Law Review*, a Thomley Scholarship Recipient, a George M. Stewart Banking Award Recipient and the recipient of numerous Scholar of Merit Awards.

## OFFICE LOCATIONS

### Birmingham

Tele: (205) 868 • 6000  
100 Brookwood Place  
7th Floor  
Birmingham, AL 35209

### Mobile

Tele: (251) 433 • 6049  
RSA-Battle House Tower  
11 North Water Street  
20th Floor  
Mobile, AL 36602

[starneslaw.com](http://starneslaw.com)

The Alabama Rules of Professional Conduct require the following statement: *No representation is made that the quality of the legal services to be performed is greater than the quality of legal services performed by other lawyers.*

*This bulletin, and all the content it contains, was created by attorneys of Starnes Davis Florie LLP. The content of this bulletin does not convey legal advice, nor other professional advice of any kind. Your use of this bulletin does not create a lawyer-client relationship between you and the Firm.*

© March 2012, Starnes Davis Florie LLP